

**BEFORE THE  
PUBLIC SERVICE COMMISSION OF  
SOUTH CAROLINA**

**DOCKET NO. 2018-3-E**

In the Matter of  
Annual Review of Base Rates  
for Fuel Costs for  
Duke Energy Carolinas, LLC

)  
)  
)  
)

**DIRECT TESTIMONY OF  
KIMBERLY D. MCGEE FOR DUKE  
ENERGY CAROLINAS, LLC**

---

1    **Q.    PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2    A.    My name is Kimberly D. McGee, and my business address is 550 South Tryon  
3        Street, Charlotte, North Carolina.

4    **Q.    BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5    A.    I am a Rates Manager supporting both Duke Energy Carolinas, LLC (“DEC” or  
6        the “Company”) and Duke Energy Progress, LLC (“DEP”) (collectively, the  
7        “Companies”).

8    **Q.    PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND**  
9        **PROFESSIONAL EXPERIENCE.**

10   A.   I graduated from the University of North Carolina at Charlotte with a Bachelor of  
11        Science degree in Accountancy. I am a certified public accountant licensed in the  
12        State of North Carolina. I began my career in 1989 with Deloitte and Touche,  
13        LLP as a staff auditor. In 1992, I began working with DEC (formerly known as  
14        Duke Power Company) as a staff accountant and have held a variety of positions  
15        in the finance organization. From 1997 until 2009, I worked for Wachovia Bank  
16        (now known as Wells Fargo) in a variety of finance and regulatory positions. I  
17        rejoined DEC in January 2009 as a Lead Accountant in Financial Reporting. I  
18        joined the Rates Department in 2011 as Manager, Rates and Regulatory Filings.

19   **Q.    HAVE YOU TESTIFIED BEFORE THIS COMMISSION IN ANY PRIOR**  
20        **PROCEEDINGS?**

21   A.   Yes. I testified before the Public Service Commission of South Carolina  
22        (“PSCSC” or “Commission”) in DEC’s 2017 annual fuel and environmental cost  
23        recovery proceeding in Docket 2017-3-E and in DEP’s 2016 and 2015 annual fuel

1 and environmental cost recovery proceedings in Docket Nos. 2016-1-E and 2015-  
2 1-E.

3 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

4 A. The purpose of my testimony is to provide DEC's actual fuel, capacity related  
5 costs including Public Utility Regulatory Policies Act of 1978 ("PURPA")  
6 capacity, environmental, and Distributed Energy Resource Program ("DERP")  
7 cost data for June 1, 2017 through May 31, 2018 (the "review period"), the  
8 projected fuel, capacity related costs, environmental and DERP cost information  
9 for June 1, 2018 through September 30, 2018 (the "forecast period"), and DEC's  
10 proposed fuel factors by customer class for October 1, 2018 through September  
11 30, 2019 (the "billing period"). I have provided fourteen exhibits to support my  
12 testimony.

13 **Q. WHAT IS THE SOURCE OF THE ACTUAL INFORMATION AND DATA**  
14 **FOR THE REVIEW PERIOD?**

15 A. Actual test period kilowatt hour ("kWh") generation, kWh sales, fuel-related  
16 revenues, fuel-related expenses, and DERP revenues and expenses were taken  
17 from DEC's books and records. These books, records, and reports of DEC are  
18 subject to review by the appropriate regulatory agencies in the three jurisdictions  
19 that regulate DEC's electric rates.

20 In addition, independent auditors perform an annual audit to provide  
21 assurance that, in all material respects, internal accounting controls are operating  
22 effectively and DEC's financial statements are accurate.

23 **Q. DOES DEC PURCHASE POWER AND HOW ARE THESE COSTS**

1           **RECORDED?**

2       A.     Yes. The Company continuously evaluates purchasing power if it can be reliably  
3           procured and delivered at a price that is less than the variable cost of DEC's  
4           generation. In accordance with S.C. Code Ann. § 58-27-865(A), DEC recovers  
5           from its South Carolina retail customers an amount that is the lower of the  
6           purchase price or DEC's avoided variable cost for generating an equivalent  
7           amount of power for its economy purchases. The Company also engages in  
8           economy purchases (and economy sales) with DEP as a result of the Joint  
9           Dispatch Agreement.

10           The Company also purchases power from certain suppliers that are treated  
11           as firm generation capacity purchases. In accordance with S.C. Code Ann. § 58-  
12           27-865(A)(2)(a), all amounts paid to these suppliers are recorded as recoverable  
13           fuel costs with the exception of capacity charges.

14           Finally, the Company routinely purchases power from qualifying facilities  
15           under the Public Utility Regulatory Policies Act of 1978 ("PURPA"). According  
16           to revisions in Act 236 that are set forth in S.C. Code Ann. § 58-27-865(A), the  
17           avoided cost payments for such purchases are included in fuel recoverable from  
18           South Carolina retail customers. In addition, Act 236 also made revisions to § 58-  
19           27-865(A)(1) relating to the allocation of any capacity costs that are recovered  
20           under the fuel factor.

21       **Q.     PLEASE EXPLAIN MCGEE EXHIBIT NO. 1.**

22       A.     McGee Exhibit No. 1 is a summary of DEC's recommended fuel rate components  
23           for the billing period. The components include amounts for (1) capacity related

1 costs, (2) DERP avoided costs, (3) variable environmental costs, (4) DERP  
2 incremental costs, and (5) all other fuel costs, which are referred to as “base” fuel  
3 costs. These fuel rate components are supported by McGee Exhibit Nos. 2  
4 through 14 and individually discussed further in my testimony. The following  
5 table shows the rates and monthly charges proposed by the Company in this  
6 proceeding as reflected in McGee Exhibit No. 1. As reflected in the table, the  
7 DERP incremental cost component is computed as a dollar amount per customer  
8 account since these amounts are subject to per-account cost caps established by  
9 Act 236. All other fuel components are computed as a rate per kWh.

10 Pursuant to Act 236, the capacity components and the  
11 DERP avoided cost components are shown separately. Act 236 requires that  
12 capacity costs and avoided costs of distributed energy resource programs be  
13 allocated and recovered among customer classes using the same method that is  
14 used to allocate and recover variable environmental costs.

15 In addition, McGee Exhibit No. 1 includes the projected per-account  
16 charge per month of \$0.90, \$9.95 and \$100.00, including Gross Receipts Tax  
17 (“GRT”), for South Carolina residential, general service, and industrial customers,  
18 for the recovery of 100 percent of the DERP incremental costs, in accordance  
19 with S.C. Code Ann. § 58-27-865(A)(1). The DERP incremental cost component  
20 is shown separately because Act 236 requires that incremental costs of DERP be  
21 allocated among customer classes using the same method that is used to allocate  
22 variable environmental costs.

Description	Customer Class		
	Cents / kWh		
	Residential	General/Lightin g	Industrial
<b>Base Fuel Costs</b>			
Base Fuel Cost Component Under / (Over) at September 2017	0.3488	0.3488	0.3488
Base Fuel Cost Component Projected Billing Period	1.7728	1.7728	1.7728
Total Base Fuel Cost Component	2.1216	2.1216	2.1216
<b>Capacity Related Costs</b>			
	Cents / kWh		
PURPA Purchased Power Component Under / (Over) at September 2017	(0.0136)	0.0004	0.0051
Capacity Related Cost Component Projected Billing Period	0.1410	0.1154	0.0850
Total Capacity Related Cost Component	0.1274	0.1158	0.0901
<b>Distributed Energy Resource Program Avoided Costs</b>			
	Cents / kWh		
DERP Avoided Costs Component Under / (Over) at September 2017	0.0001	0.0001	0.0001
DERP Avoided Costs Component Projected Billing Period	0.0005	0.0004	0.0003
Total DERP Avoided Costs Component	0.0006	0.0005	0.0004
<b>Environmental Costs</b>			
	Cents / kWh		
Environmental Component Under / (Over) at September 2017	(0.0141)	(0.0058)	(0.0017)
Environmental Component Projected Billing Period	0.0307	0.0251	0.0185
Total Environmental Component	0.0166	0.0193	0.0168
<b>Total Fuel Cost Factor</b>	<b>2.2662</b>	<b>2.2572</b>	<b>2.2289</b>
<b>Distributed Energy Resource Program Incremental Cost per Account</b>			
	<b>Residential</b>	<b>General Service</b>	<b>Industrial</b>
Total DERP Annual Charge - including GRT	\$ 10.80	\$ 119.45	\$ 1,200.00
Total DERP Monthly Charge - including GRT	\$ 0.90	\$ 9.95	\$ 100.00

Q. HOW DID DEC'S FUEL REVENUE BILLINGS COMPARE TO THE FUEL COSTS INCURRED DURING THE JUNE 2017 – MAY 2018 TIME PERIOD?

A. McGee Exhibit No. 2 is a monthly comparison of fuel revenues billed to South Carolina retail customers to the actual and estimated jurisdictional fuel costs

1           attributable to those sales. As shown on Exhibit 2, the projected DEC fuel  
2           recovery status at September 30, 2018 is an under-recovery of \$75.6 million.

3       **Q.     PLEASE EXPLAIN MCGEE EXHIBIT NO. 3.**

4       A.     McGee Exhibit No. 3 presents DEC's recommended projected base fuel rate of  
5           1.7728¢/kWh for the billing period for the recovery of South Carolina's retail  
6           share of \$1.5 billion of projected system fuel expense. The South Carolina retail  
7           share also incorporates the NEM avoided fuel benefits assigned fully to SC  
8           customers.

9           The fuel forecast supporting the projected fuel cost was generated by an  
10          hourly dispatch model that considers the latest forecasted fuel prices, outages at  
11          the generating plants based on planned maintenance and refueling schedules,  
12          forced outages based on historical trends, generating unit performance  
13          parameters, and expected market conditions associated with power purchase and  
14          off-system sales opportunities. In addition, the forecasting model reflects the  
15          joint dispatch of the combined power supply resources of the Companies.

16       **Q.     PLEASE PROVIDE A STATUS UPDATE OF ENVIRONMENTAL COST**  
17       **COLLECTION AND EXPLAIN HOW THESE COSTS HAVE BEEN**  
18       **TREATED IN THIS FILING.**

19       A.     During the review period, DEC recovered variable environmental costs and the  
20           costs of emission allowances through the environmental component of the fuel  
21           rate. Environmental costs allocated to the South Carolina retail jurisdiction  
22           during the review period were approximately \$6.4 million, as shown by month on  
23           McGee Exhibit No. 4. The Company currently estimates that its deferred

1 environmental cost balance will be an over-collection of \$1.4 million at  
2 September 30, 2018.

3 **Q. HAVE YOU PROVIDED A FORECAST OF ENVIRONMENTAL COSTS?**

4 A. Yes, McGee Exhibit No. 5 presents DEC's estimated system environmental costs  
5 for the billing period of \$21.1 million. The South Carolina retail portion is  
6 forecasted to be approximately \$5.2 million.

7 **Q. PLEASE DESCRIBE EMISSION-REDUCING CHEMICALS THAT DEC**  
8 **WILL INCLUDE IN THE PROPOSED FUEL RATE IN THIS FILING.**

9 A. As Company witness Miller explains more specifically in his testimony, DEC  
10 uses emission-reducing chemicals at its fossil/hydro plants to help it provide low  
11 cost, reliable electric generation for its customers while also complying with state  
12 and federal environmental control obligations. As a result, DEC has included the  
13 cost of magnesium hydroxide, calcium carbonate, ammonia, trona, urea,  
14 quicklime, limestone, lime and hydrated lime incurred during the review period in  
15 its fuel cost recovery application. Mercury and Air Toxics Standards ("MATS")  
16 chemicals that DEC may use in the future to reduce emissions include, but may  
17 not be limited to, activated carbon, mercury oxidation chemicals, and mercury re-  
18 emission prevention chemicals.

19 **Q. HOW DID DEC ALLOCATE ENVIRONMENTAL COSTS?**

20 A. Environmental costs were allocated to Residential, General Service/Lighting, and  
21 Industrial customer classes based upon the firm coincident peak demand  
22 experienced. The 2016 firm coincident peak demand was used to allocate costs  
23 for the period June 2017 – December 2017 and the 2017 firm coincident peak



1 demand was used to allocate costs for the period January 2018 – September 2019.

2 This allocation is shown on McGee Exhibit Nos. 4 and 5.

3 **Q. PLEASE PROVIDE A STATUS UPDATE OF CAPACITY-RELATED**  
4 **COST COLLECTION AND EXPLAIN HOW THESE COSTS HAVE BEEN**  
5 **TREATED IN THIS FILING?**

6 **A.** During the review period, DEC recovered capacity-related costs, including  
7 PURPA purchased power capacity costs, as well as natural gas transportation and  
8 storage costs, as a component of the fuel rate. Capacity-related costs allocated to  
9 the South Carolina retail jurisdiction during the review period were approximately  
10 \$13.1 million, as shown on McGee Exhibit No. 6. The Company currently  
11 estimates that its cumulative capacity-related cost balance as of September 30,  
12 2018 will be an over-recovery of \$396,889.

13 **Q. PLEASE EXPLAIN MCGEE EXHIBIT NO. 7.**

14 **A.** McGee Exhibit No. 7 presents DEC's estimated capacity-related costs, including  
15 PURPA purchased power capacity costs, as well as natural gas transportation and  
16 storage costs, for the billing period of \$96.1 million. The South Carolina retail  
17 portion is forecasted to be approximately \$23.9 million. The costs associated with  
18 natural gas transportation and storage are described more fully below in my  
19 testimony.

20 **Q. HOW DID DEC ALLOCATE CAPACITY-RELATED COSTS?**

21 **A.** As a result of changes made in S.C. Code Ann. § 58-27-865(A)(1) by Act 236,  
22 capacity costs recovered through the fuel factor shall be allocated and recovered  
23 from customers under a separate capacity component of the overall fuel factor

1 based on the same method that is used by the utility to allocate and recover  
2 variable environmental costs. Thus, capacity-related costs were allocated to  
3 Residential, General Service/Lighting, and Industrial customer classes based upon  
4 the firm coincident peak demand. The 2016 firm coincident peak demand was  
5 used to allocate costs for the period June 2017 - December 2017 and the 2017  
6 firm coincident peak demand was used to allocate costs for the period January  
7 2018 – September 2019. This allocation is shown on McGee Exhibit Nos. 6 and  
8 7.

9 **Q. ARE DERP COSTS AND ASSOCIATED REVENUES INCLUDED IN**  
10 **THIS FUEL FILING?**

11 A. Yes. Pursuant to S.C. Code Ann. § 58-39-130(A)(2), an electrical utility shall be  
12 permitted to recover its costs related to its approved DERP. The Commission  
13 approved DEC's recovery of DERP costs in Order No. 2015-713. Beginning in  
14 October 2015, revenues were collected from customers on a per account basis,  
15 and McGee Exhibit Nos. 8-14 provide details regarding the allocation and  
16 recovery of the DERP costs.

17 **Q. PLEASE EXPLAIN WHAT IS SHOWN ON MCGEE EXHIBIT NO. 8.**

18 A. McGee Exhibit No. 8 provides DEC's actual DERP incremental cost for the  
19 review period and the estimated DERP incremental cost for the estimated period  
20 by month. Incremental costs that were exclusively assigned to the South Carolina  
21 retail jurisdiction, during the review period were approximately \$8.2 million<sup>1</sup> and  
22 \$3.6 million for the estimated period. McGee Exhibit No. 8 also computes a  
23 monthly (over)/under recovery of DERP incremental costs by comparing the

---

<sup>1</sup> The \$8.2 million includes the adjustments listed in McGee Exhibit 8 - line item 26.

1 actual and estimated expenses incurred during the review period and the estimated  
2 period to the revenue collected or estimated during the actual and estimated  
3 period. As shown on Exhibit 8, the projected DERP incremental cost recovery  
4 status at September 30, 2018 is an approximate under-recovery of \$1.7 million.

5 **Q. PLEASE EXPLAIN WHAT IS SHOWN ON MCGEE EXHIBIT NO. 9.**

6 **A.** McGee Exhibit No. 9 establishes the monthly charges by customer class for  
7 incremental DERP (over)/under recovery. DEC proposes the per-account monthly  
8 increment for under-recovery of \$0.11 \$1.26 and \$31.19 for South Carolina  
9 Residential, Commercial (General Service/Lighting) and Industrial customers,  
10 excluding GRT.

11 **Q. WHAT INCREMENTAL COSTS ARE INCLUDED ON MCGEE EXHIBIT**  
12 **NOS. 8 AND 10?**

13 **A.** S.C. Code Ann. § 58-39-140 defines “incremental costs” as all reasonable and  
14 prudent costs incurred by an electrical utility to implement a distributed energy  
15 resource program. This filing includes the following categories of incremental  
16 costs:

- 17 • Costs associated with purchase power agreements (“PPA”) in excess of  
18 the Company’s avoided cost rate;
- 19 • The DERP net energy metering (“NEM”) Incentive, which is a credit  
20 available to eligible NEM customer-generators, approved in Docket No.  
21 2014-246-E;
- 22 • Avoided capacity costs associated with NEM, recoverable as an  
23 incremental cost based on Section 58-40-20(F)(6);

- 1       •       Rebates given to residential and non-residential customers to invest in or  
2               lease distributed generation and carrying costs related to the amortization  
3               of the rebate amounts;
- 4       •       An incentive utilized to lower the subscription charge customers will pay  
5               to participate in a Shared Solar program;
- 6       •       General and administrative costs, which include the cost of developing  
7               and implementing programs, cost of incremental labor and additional  
8               revenue-grade meters.

9       **Q.   HAS THE COMPANY COMPUTED AN UPDATED DERP NEM**  
10       **INCENTIVE AS PART OF THIS FUEL FILING?**

11      A.   Yes. There were no changes to the methodology used to derive the DERP NEM  
12           Incentive, which is described in the Settlement Agreement in Docket No. 2014-  
13           246-E and approved in the Commission's Order No. 2015-194. However, the  
14           inputs to the NEM Incentive calculations were updated to reflect more current  
15           information. Specifically, the hourly load associated with each rate class was  
16           updated to 2017 and the hourly solar profiles were updated to match this same  
17           period. Additionally, the billing rates were updated to reflect current rates  
18           approved effective January 1, 2018. The calculation of the updated NEM  
19           Incentive is shown on Exhibit 14 and the impact is reflected in the billing period  
20           amounts shown on McGee Exhibit No. 10.

21      **Q.   HOW DID THE COMPANY ALLOCATE AND RECOVER ITS**  
22       **INCREMENTAL COSTS?**

1     **A.**     DEC allocated 100 percent of DERP incremental costs to Residential, General  
2             Service, and Industrial rate classes based upon the firm peak demand of each class  
3             for the prior year. For recovery purposes, each class's allocated portion of  
4             incremental costs will be divided by the number of accounts subject to DERP in  
5             each class. This method results in an annual dollar per account charge for all  
6             accounts subject to DERP in each class. The annual charge is a separate fixed  
7             monthly component of the fuel factor for each class of customer.

8             One exception to this approach is the allocation of the avoided capacity  
9             costs associated with NEM that is included in the DERP incremental costs. This  
10            particular incremental cost has been allocated to South Carolina retail based on its  
11            pro rata share of system peak demand, rather than 100 percent. This DERP cost is  
12            related to system generation supply resources. Costs and benefits associated with  
13            system generation supply resources are traditionally allocated among all of the  
14            Company's rate jurisdictions since such generation supply resources are operated  
15            as a portfolio to serve its native load customers in all rate jurisdictions.

16    **Q.     PLEASE EXPLAIN WHAT IS SHOWN ON MCGEE EXHIBIT NO. 10.**

17    **A.**     McGee Exhibit No. 10 provides DEC's projected DERP incremental cost for the  
18             billing period of \$11.9 million.

19    **Q.     PLEASE EXPLAIN WHAT IS SHOWN ON MCGEE EXHIBIT NO. 11.**

20    **A.**     McGee Exhibit No. 11 shows the calculation of the prospective per-account  
21             charge by customer class in order for DEC to recover DERP forecasted  
22             incremental costs. DEC has estimated per-account charges per month of \$0.78,  
23             \$8.66 and \$215.05 for South Carolina Residential, Commercial and Industrial

1 customers, excluding GRT. Proposed rates are subject to per-account cost caps.

2 **Q. WHAT DERP AVOIDED COSTS ARE INCLUDED IN THIS FILING?**

3 A. Avoided cost generally refers to the cost the utility avoids when buying power  
4 from another entity rather than generating the power itself. Under PURPA,  
5 payments made to qualifying facilities for power are based on avoided cost rates.  
6 In the DERP context, S.C. Code Ann. §58-39-140(A)(1) states that “avoided cost”  
7 for purposes of separating total DERP program costs between incremental and  
8 avoided costs is “all costs paid under avoided cost rates, or negotiated rates  
9 pursuant to PURPA, whichever is lower.” In S.C. Code Ann. § 58-39-120(B),  
10 avoided costs are further defined, indicating that they are to be rates most recently  
11 approved by the Commission, or negotiated pursuant to PURPA.

12 **Q. HOW WILL THE COMPANY ALLOCATE AND RECOVER ITS DERP**  
13 **AVOIDED COSTS?**

14 A. DEC is allocating and recovering DERP avoided costs based on the same method  
15 that is used by the utility to allocate and recover variable environmental costs. As  
16 such, DEC allocates the South Carolina Retail portion of DERP avoided costs to  
17 Residential, Commercial and Industrial rate classes based upon the firm peak  
18 experienced by each class during the review period. The total cost allocated to  
19 each class is divided by projected sales to arrive at a cents per kWh.

20 **Q. PLEASE EXPLAIN WHAT IS SHOWN ON MCGEE EXHIBIT NO. 12.**

21 A. McGee Exhibit No. 12 shows the calculation of the (over)/under recovery by  
22 customer class of total DERP avoided energy and capacity costs. Avoided energy  
23 and capacity costs allocated to the South Carolina retail jurisdiction during the

1 review period were \$11,162, as shown by month on McGee Exhibit No. 12. The  
2 Company currently estimates that its deferred environmental cost balance will be  
3 an under-collection of \$19,459 at September 30, 2018.

4 **Q. HAVE YOU PROVIDED A FORECAST OF DERP AVOIDED COSTS IN**  
5 **MCGEE EXHIBIT NO. 13?**

6 A. Yes, McGee Exhibit No. 13 provides DEC's projected DERP avoided cost for the  
7 billing period of \$321,652. The South Carolina retail portion is forecasted to be  
8 approximately \$80,143.

9 **Q. HAVE ANY CUSTOMER CLASSES REACHED THE DERP PER**  
10 **ACCOUNT CAP IN THIS FILING?**

11 A. Yes, the Industrial customer class has reached the per-account cap in this filing.  
12 As a result, we have limited the proposed rates to a per-account per month charge  
13 of \$100.00 for South Carolina industrial customers, including GRT.

14 **Q. DO YOU BELIEVE DEC'S ACTUAL FUEL COSTS AND DERP COSTS**  
15 **INCURRED DURING THE PERIOD WERE REASONABLE?**

16 A. Yes. I believe the costs were reasonable and that DEC has demonstrated that it  
17 has met the criteria set forth in S.C. Code Ann. § 58-27-865. These costs also  
18 reflect DEC's continuing efforts to maintain reliable service and an economical  
19 generation mix, thereby minimizing the total cost of providing service to DEC's  
20 South Carolina retail customers. I also believe that the DERP costs were  
21 reasonable and that DEC has demonstrated that it met the criteria set forth in S.C.  
22 Code Ann. § 58-39-130(A)(2).

23 **Q. WHAT ARE THE KEY DRIVERS IMPACTING THE PROPOSED FUEL**

1           **FACTOR?**

2       A.     A number of factors contribute to the change in the proposed total fuel cost  
3           factors for all customer classes. Total base fuel cost factors for the billing period  
4           are increasing primarily due to a larger under-collection of fuel costs included in  
5           the 2018 proposed base fuel rates resulting from extreme weather conditions in  
6           January 2018. In addition, DERP incremental costs included in the 2018  
7           proposed DERP per account charges have increased as compared to existing rates.  
8           These two impacts are the most significant drivers of the fuel rate change.

9       **Q.     INCLUDING THE DERP INCREMENTAL PER ACCOUNT CHARGES,**  
10       **WHAT IS THE IMPACT TO CUSTOMERS' BILLS IF THE PROPOSED**  
11       **FUEL COST, CAPACITY-RELATED COST, DERP AVOIDED COST,**  
12       **AND ENVIRONMENTAL COST FACTORS ARE APPROVED BY THE**  
13       **COMMISSION?**

14      A.     The impact of all components of this filing to customers' monthly bills of a typical  
15           residential customer using 1000 kWh per month is an increase of \$4.75, or 4.2  
16           percent. The impacts for average general service, lighting and industrial customers  
17           vary by customer, but are approximately of 6.1 percent, 2.4 percent, and 8.0 percent,  
18           respectively.

19      **Q.     DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

20      A.     Yes, it does.



DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF TOTAL FUEL COMPONENT  
BILLING PERIOD OCTOBER 1, 2018 TO SEPTEMBER 30, 2019

Line No.	Description	Reference	Customer Class		
			Cents / kWh		
			General /		
			Residential	Lighting	Industrial
<b>Base Fuel Costs</b>					
1	Base Fuel Cost Component Under / (Over) at September 2018	Exhibit 2 Page 2	0.3488	0.3488	0.3488
2	Base Fuel Cost Component Projected Billing Period	Exhibit 3	1.7728	1.7728	1.7728
3	Total Base Fuel Cost Component		2.1216	2.1216	2.1216
<b>Capacity Related Costs</b>					
4	PURPA Purchased Power Component Under / (Over) at September 2018	Exhibit 6 Page 1, 2, 3	(0.0136)	0.0004	0.0051
5	Capacity Related Cost Component Projected Billing Period	Exhibit 7	0.1410	0.1154	0.0850
6	Total Capacity Related Cost Component	Line 4 + 5	0.1274	0.1158	0.0901
<b>Distributed Energy Resource Program Avoided Costs</b>					
7	DERP Avoided Costs Component Under / (Over) at September 2018	Exhibit 12 Page 1,2,3	0.0001	0.0001	0.0001
8	DERP Avoided Costs Component Projected Billing Period	Exhibit 13	0.0005	0.0004	0.0003
9	Total DERP Avoided Costs Component	Line 7 + 8	0.0006	0.0005	0.0004
<b>Environmental Costs</b>					
10	Environmental Component Under / (Over) at September 2018	Exhibit 4 Page 1, 2, 3	(0.0141)	(0.0058)	(0.0017)
11	Environmental Component Projected Billing Period	Exhibit 5	0.0307	0.0251	0.0185
12	Total Environmental Component	Line 10 + 11	0.0166	0.0193	0.0168
13	Total Fuel Cost Factor	Sum Line 3 + Line 6 + Line 9 + Line 12	2.2662	2.2572	2.2289
<b>Distributed Energy Resource Program Incremental Cost per Account</b>					
			General		
			Residential	Service	Industrial
<b>DERP Incremental Under / (Over) at September 2018</b>					
14	Annual Charge / (Credit)	Exhibit 9	\$ 1.36	\$ 15.06	\$ 374.25
15	Monthly Charge / (Credit)	Exhibit 9	\$ 0.11	\$ 1.26	\$ 31.19
<b>DERP Incremental Projected Billing Period</b>					
16	Annual Charge	Exhibit 11	\$ 9.39	\$ 103.86	\$ 2,580.70
17	Monthly Charge	Exhibit 11	\$ 0.78	\$ 8.66	\$ 215.06
18	Total DERP Annual Charge - excluding GRT	Line 14 + Line 16	\$ 10.75	\$ 118.92	\$ 1,200.00
19	Total DERP Monthly Charge - excluding GRT	Line 15 + Line 17	\$ 0.90	\$ 9.91	\$ 100.00
20	Total DERP Annual Charge per account CAP		\$ 12.00	\$ 120.00	\$ 1,200.00
21	Total DERP Annual Charge - including GRT	Line 18 / (1-Tax Rate)	\$ 10.80	\$ 119.45	\$ 1,200.00
22	Total DERP Monthly Charge - including GRT	Line 19 / (1-Tax Rate)	\$ 0.90	\$ 9.95	\$ 100.00
Totals may not sum due to rounding					

Totals may not sum due to rounding

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF BASE FUEL (OVER) / UNDER RECOVERY  
ACTUAL COSTS AND REVENUES JUNE 2017 - MAY 2018

Line No.	Description	Reference	June 2017	July 2017	August 2017	September 2017	October 2017	November 2017
1	Coal		\$ 74,811,660	\$ 100,395,302	\$ 84,699,609	\$ 50,916,652	\$ 46,746,306	\$ 39,498,559
2	Gas		22,774,216	27,137,935	25,371,393	23,631,728	22,428,247	26,728,244
3	Nuclear Fuel		26,745,146	27,446,315	27,638,720	24,556,576	21,980,499	21,349,394
4	Purchased Power		19,615,582	22,853,137	26,341,825	29,927,562	29,307,786	32,903,659
5	Fuel Expense Recovered Through Intersystem Sales		(3,547,644)	(2,599,603)	(3,535,888)	(2,981,870)	(2,310,970)	(1,410,536)
6	Total Fuel Costs	Sum Lines 1 through 6	\$ 140,398,960	\$ 175,233,087	\$ 160,515,657	\$ 126,050,647	\$ 118,151,867	\$ 119,069,322
7	Eliminate Avoided Fuel Benefit of SC NEM		109,647	117,273	124,941	129,910	131,350	132,631
8	Adjusted System Fuel costs	Line 6 + 7	\$ 140,508,607	\$ 175,350,360	\$ 160,640,598	\$ 126,180,557	\$ 118,283,217	\$ 119,201,953
9	Total System KWH Sales		7,382,797,262	8,213,697,211	8,242,499,300	7,632,543,035	6,668,383,285	6,410,573,998
10	Eliminate NEM Solar Generation kwHs		3,385,344	3,620,824	3,857,580	4,010,932	4,057,468	4,097,904
11	Adjusted Projected System kwh Sales	Line 9 + 10	7,386,182,606	8,217,318,035	8,246,356,880	7,636,553,967	6,672,440,753	6,414,671,902
12	System cost c/kwh	(Line 8 *100) / (Line 9)	1.9023	2.1339	1.9480	1.6523	1.7727	1.8583
13	Actual/Projected SC Retail Sales KWh (w/solar)		1,840,787,327	2,004,626,644	2,045,712,681	1,907,259,402	1,664,779,554	1,604,311,093
14	Eliminate the NEM Impact of Solar Generation kwhs		3,385,344	3,620,824	3,857,580	4,010,932	4,057,468	4,097,904
15	Adjusted Actual/Projected SC Retail Sales KWh (w/o solar)	Line 13 + 14	1,844,172,671	2,008,247,468	2,049,570,261	1,911,270,334	1,668,837,022	1,608,408,997
16	SC Base Fuel Costs	Line 12 * Line 15 /100	\$ 35,082,010	\$ 42,854,240	\$ 39,926,018	\$ 31,580,364	\$ 29,583,689	\$ 29,888,589
17	Assign 100% of avoided Fuel benefit of SC NEM	Line 7	(109,647)	(117,273)	(124,941)	(129,910)	(131,350)	(132,631)
18	Adjusted SC Base Fuel Costs	Line 16 + 17	\$ 34,972,363	\$ 42,736,967	\$ 39,801,077	\$ 31,450,454	\$ 29,452,339	\$ 29,755,958
19	Fuel Costs Collected - non capacity revenue		\$ 29,226,181	\$ 31,827,457	\$ 32,479,779	\$ 30,281,558	\$ 27,411,581	\$ 27,695,070
20	Fuel Benefit given in SC NEM Incentive	Line 19 + 20	29,193,257	31,792,236	32,442,235	30,242,523	27,358,520	27,630,706
21	Adjusted Fuel Costs Collected		(32,924)	(35,221)	(37,544)	(39,035)	(53,061)	(64,364)
22	(Over)/Under Current Month	Line 21- Line 18	\$ 5,779,106	\$ 10,944,730	\$ 7,358,842	\$ 1,207,931	\$ 2,093,819	\$ 2,125,251
23	(Over) / Under Cumulative Balance May 2017	Prior Year Annual Filing	7,670,353	-	-	-	-	-
24	Adjustment		-	-	-	-	-	-
25	(Over)/Under Cumulative Balance	Prior month Line 26 + Line 22 + Sum (Current month Lines 24-25)	\$ 13,449,459	\$ 24,394,189	\$ 31,753,031	\$ 32,960,962	\$ 35,054,781	\$ 37,180,032

Line No.	Description	Reference	December 2017	January 2018	February 2018	March 2018	April 2018	May 2018	Twelve Months Ended May 2018
26	Coal		\$ 54,926,609	\$ 97,350,370	\$ 28,906,982	\$ 56,395,872	\$ 36,308,705	\$ 64,469,257	\$ 735,425,883
27	Gas		26,201,507	88,979,113	24,164,907	31,701,181	30,081,254	28,863,383	378,063,108
28	Nuclear Fuel		25,331,093	25,328,094	22,598,045	24,578,819	21,841,292	22,287,681	291,681,674
29	Purchased Power		37,059,052	80,551,693	28,905,890	18,361,522	17,705,909	19,358,965	362,892,583
30	Fuel Expense Recovered Through Intersystem Sales		(3,751,028)	(30,117,348)	(253,474)	(6,990,720)	(8,145,388)	(6,325,916)	(71,970,386)
31	Total Fuel Costs	Sum Lines 27 through 31	\$ 139,767,233	\$ 262,091,923	\$ 104,322,348	\$ 124,046,675	\$ 97,791,773	\$ 128,653,370	\$ 1,696,092,861
32	Eliminate Avoided Fuel Benefit of SC NEM		141,744	188,837	190,035	203,056	274,934	299,867	2,044,225
33	Adjusted System Fuel costs	Line 32 + Line 33	\$ 139,908,977	\$ 262,280,760	\$ 104,512,383	\$ 124,249,731	\$ 98,066,707	\$ 128,953,236	\$ 1,698,137,087
34	Total System KWH Sales (w/solar)		7,057,410,509	8,697,594,873	7,453,819,034	6,443,723,578	6,581,829,396	6,581,962,808	87,366,834,289
35	Eliminate NEM Solar Generation kwhs		4,379,391	5,835,058	5,872,084	6,274,434	8,499,697	9,270,530	63,161,246
36	Adjusted Projected System kwh Sales (w/o solar)	Line 35 + Line 36	7,061,789,900	8,703,429,931	7,459,691,118	6,449,998,012	6,590,329,093	6,591,233,338	87,429,995,535
37	System cost c/kwh	Line 34 / Line 37 * 100	1.9812	3.0135	1.4010	1.9264	1.4880	1.9564	
38	Actual/Projected SC Retail Sales KWh (w/solar)		1,689,291,924	2,004,246,555	1,791,706,347	1,524,004,658	1,584,758,862	1,640,451,950	21,301,936,997
39	Eliminate the NEM Impact of Solar Generation KWhs		4,379,391	5,835,058	5,872,084	6,274,434	8,499,697	9,270,530	63,161,246
40	Adjusted Actual/Projected SC Retail Sales KWh (w/o solar)	Line 39 + Line 40	1,693,671,315	2,010,081,613	1,797,578,431	1,530,279,092	1,593,258,559	1,649,722,480	21,365,098,243
41	SC Base Fuel Costs	Line 38 * Line 41 /100	\$ 33,555,207	\$ 60,574,478	\$ 25,184,582	\$ 29,478,577	\$ 23,708,318	\$ 32,275,758	\$ 413,691,831
42	Assign 100% of avoided fuel benefit of SC NEM	Line 33	(141,744)	(188,837)	(190,035)	(203,056)	(274,934)	(299,867)	(2,044,225)
43	Adjusted SC Base Fuel Costs	Line 42 + Line 43	\$ 33,413,463	\$ 60,385,641	\$ 24,994,547	\$ 29,275,521	\$ 23,433,384	\$ 31,975,892	\$ 411,647,606
44	Fuel Costs Collected - non capacity revenue		\$ 29,174,071	\$ 34,613,338	\$ 30,942,769	\$ 26,319,560	\$ 27,368,786	\$ 28,330,605	\$ 355,670,755
45	Fuel Benefit given in SC NEM Incentive		(68,793)	(92,254)	(92,837)	(99,216)	(133,731)	(145,988)	(894,968)
46	Adjusted Fuel Costs Collected	Line 45 + Line 46	\$ 29,105,278	\$ 34,521,084	\$ 30,849,932	\$ 26,220,344	\$ 27,235,055	\$ 28,184,617	\$ 354,775,787
47	(Over)/Under Current Month	Line 44 - Line 47	\$ 4,308,185	\$ 25,864,557	\$ (5,855,385)	\$ 3,055,177	\$ (3,801,671)	\$ 3,791,274	\$ 56,871,819
48	Adjustment		-	-	-	5,807	80,739	(66,306)	20,240
49	(Over)/Under Cumulative Balance	Prior month Line 50 + Sum (Current month Lines 48-49)	\$ 41,488,217	\$ 67,352,774	\$ 61,497,389	\$ 64,558,373	\$ 60,837,441	\$ 64,562,410	\$ 64,562,410

**DUKE ENERGY CAROLINAS, LLC**  
**SOUTH CAROLINA RETAIL FUEL CASE**  
**CALCULATION OF BASE FUEL (OVER) / UNDER RECOVERY**  
**ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2018**

Line No.	Description	Reference	<i>Estimated</i>				<i>Estimated</i>	<i>Estimated</i>	<i>Estimated</i>
			June 2018	July 2018	August 2018	September 2018			
50	Coal		\$ 66,025,014	\$ 82,734,655	\$ 78,783,662	\$ 51,473,243			
51	Gas		35,280,038	38,120,135	37,912,883	34,164,204			
52	Nuclear Fuel		23,829,415	25,030,044	24,391,817	21,002,752			
53	Purchased Power		23,574,061	22,334,883	19,303,873	20,814,236			
54	Fuel Expense Recovered Through Intersystem Sales		(708,311)	(2,042,588)	(2,792,058)	(1,573,557)			
55	Total Fuel Costs	Sum of Lines 50-54	\$ 148,000,218	\$ 166,177,128	\$ 157,600,176	\$ 125,880,879			
56	Eliminate Avoided Fuel Benefit of SC NEM		313,345	325,081	333,368	341,589			
57	Adjusted System Fuel costs	Line 55 + Line 56	\$ 148,313,563	\$ 166,502,209	\$ 157,933,544	\$ 126,222,468			
58	Total Projected System KWH Sales (w/solar)		7,397,566,722	8,220,497,571	8,409,562,198	7,994,793,000			
59	Eliminate NEM Solar Generation kwhs		9,687,187	10,049,999	10,306,180	10,560,367			
60	Adjusted Projected System kwh Sales(w/o solar)	Line 58 and 59	7,407,253,909	8,230,547,570	8,419,868,378	8,005,353,367			
61	System cost ¢/kwh	Line 57 / Line 60 * 100	2.0023	2.0230	1.8757	1.5767			
62	Projected SC Retail Sales kWh (w/solar)		1,829,860,637	1,979,919,610	2,053,956,924	1,986,163,127			
63	Assign 100% of avoided fuel benefit of SC NEM		9,687,187	10,049,999	10,306,180	10,560,367			
64	Projected SC Retail Sales kWh (w/o solar)	Line 62 and 63	1,839,547,825	1,989,969,609	2,064,263,104	1,996,723,494			
65	SC Base Fuel Costs	Line 64 * Line 61 / 100	\$ 36,832,799	\$ 40,256,658	\$ 38,719,891	\$ 31,482,854			
66	Assign 100% of avoided fuel benefit of SC NEM		(313,345)	(325,081)	(333,368)	(341,589)			
67	Adjusted SC Base Fuel Costs	Line 65 + Line 66	\$ 36,519,454	\$ 39,931,577	\$ 38,386,524	\$ 31,141,264			
68	Estimated Base Fuel Cost Collected	Line 62 * 1.727 / 100	\$ 31,601,693	\$ 34,193,212	\$ 35,471,836	\$ 34,301,037			
69	Fuel Benefit given in SC NEM Incentive		(152,519)	(158,211)	(162,233)	(166,242)			
70	Adjusted Fuel Costs Collected	Line 68 + Line 69	\$ 31,449,175	\$ 34,035,001	\$ 35,309,603	\$ 34,134,795			
71	(Over)/Under Current Month	Line 67 - Line 70	\$ 5,070,279	\$ 5,896,576	\$ 3,076,921	\$ (2,993,531)			
72	Adjustment		-	-	-	-			
73	(Over)/Under Cumulative Balance	Prior month bal + current mo. Lines 71 and 72	\$ 69,632,689	\$ 75,529,265	\$ 78,606,185	\$ 75,612,654			
74	Projected SC Retail Sales kwhs (October 2018-September 2019)					21,676,037,448			
75	SC Base Fuel Rate (cents / kWh)	Line 73 / Line 74 * 100				0.3488			

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
PROJECTED BILLING PERIOD BASE FUEL COSTS  
FOR THE 12 MONTHS OCTOBER 1, 2018 TO SEPTEMBER 30, 2019

Line No.	Description	Reference	October	November	December	January	February	March
			2018	2018	2018	2019	2019	2019
1	Coal		\$ 34,109,050	\$ 25,149,321	\$ 55,843,922	\$ 91,103,980	\$ 75,406,386	\$ 33,729,731
2	Gas		31,311,476	44,439,199	39,182,746	24,291,241	19,899,465	33,616,653
3	Nuclear Fuel		19,891,450	20,204,793	22,719,190	25,684,279	23,106,062	24,029,662
4	Purchased Power		25,794,672	29,721,032	21,480,788	9,044,165	9,786,212	20,956,831
5	Fuel Expense Recovered Through Intersystem Sales		(295,417)	(247,602)	(1,207,492)	(8,994,499)	(8,626,075)	(3,902,743)
6	Total Fuel Costs	Sum Lines 1 through 5	\$ 110,811,232	\$ 119,266,744	\$ 138,019,154	\$ 141,129,166	\$ 119,572,048	\$ 108,430,133
7	Eliminate Avoided Fuel Benefit of SC NEM		348,743	339,036	333,756	351,058	360,768	380,392
8	Adjusted System Fuel costs	Line 6 + Line 7	\$ 111,159,975	\$ 119,605,780	\$ 138,352,910	\$ 141,480,223	\$ 119,932,816	\$ 108,810,525
9	Total Projected System Sales kwhs (w/solar)		6,499,954,760	6,602,598,785	7,160,709,598	8,082,286,102	7,579,000,897	6,739,338,881
10	Eliminate NEM Solar Generation kwhs		10,733,007	10,434,299	10,271,828	10,804,371	11,103,277	11,707,350
11	Adjusted Projected System kwh Sales(w/o solar)	Line 9 + Line 10	6,510,687,766	6,613,033,084	7,170,981,426	8,093,090,473	7,590,104,174	6,751,046,231
12	System Cost per kwh (c/kwh)	Line 8 / Line 11 * 100	1.7073	1.8086	1.9293	1.7482	1.5801	1.6118
13	Adjusted Projected SC Retail Sales kwhs(w/o solar)		1,653,194,426	1,656,272,755	1,730,095,930	1,941,621,831	1,890,160,429	1,701,479,433
14	SC Base Fuel Costs	Line 13 * Line 12 / 100	\$ 28,225,751	\$ 29,955,966	\$ 33,379,504	\$ 33,942,669	\$ 29,866,818	\$ 27,423,730
15	Assign 100% of Avoided Fuel Benefit of SC NEM <sup>(Note 1)</sup>		(149,350)	(145,226)	(142,984)	(150,461)	(154,686)	(163,194)
16	Adjusted SC Base Fuel Costs	Line 14 + Line 15	\$ 28,076,400	\$ 29,810,740	\$ 33,236,521	\$ 33,792,208	\$ 29,712,132	\$ 27,260,537

Line No.	Description	Reference	April	May	June	July	August	September	12 Month
			2019	2019	2019	2019	2019	2019	Total
17	Coal		\$ 22,849,825	\$ 18,858,698	\$ 46,565,021	\$ 65,745,180	\$ 54,524,729	\$ 27,095,789	\$ 550,981,631
18	Gas		35,846,443	45,349,136	50,924,788	53,479,451	51,824,581	47,647,266	477,812,446
19	Nuclear Fuel		20,763,903	24,723,353	23,891,329	24,488,031	25,048,343	21,132,678	275,683,073
20	Purchased Power		24,889,788	24,766,503	28,218,162	27,410,873	22,338,548	25,990,419	270,397,992
21	Fuel Expense Recovered Through Intersystem Sales		(341,054)	(765,418)	(687,729)	(2,096,778)	(1,884,871)	(776,137)	(29,825,816)
22	Total Fuel Costs	Sum Lines 17 through 22	\$ 104,008,905	\$ 112,932,271	\$ 148,911,571	\$ 169,026,757	\$ 151,851,330	\$ 121,090,015	\$ 1,545,049,326
23	Eliminate Avoided Fuel Benefit of SC NEM		401,305	400,432	403,097	397,503	386,661	378,751	4,481,502
24	Adjusted System Fuel costs	Line 22 + Line 23	\$ 104,410,210	\$ 113,332,703	\$ 149,314,668	\$ 169,424,260	\$ 152,237,991	\$ 121,468,766	\$ 1,549,530,828
25	Total Projected System Sales kwhs (w/solar)		6,290,451,974	6,684,011,828	7,271,666,889	8,039,482,276	8,522,431,399	7,846,096,714	87,318,030,105
26	Eliminate NEM Solar Generation kwhs		12,351,069	12,324,187	12,406,205	12,234,038	11,900,312	11,656,847	137,926,790
27	Adjusted Projected System kwh Sales(w/o solar)	Line 25 + Line 26	6,302,803,043	6,696,336,016	7,284,073,094	8,051,716,314	8,534,331,711	7,857,753,561	87,455,956,895
28	System Cost per kwh (c/kwh)	Line 24 / Line 27 * 100	1.6566	1.6925	2.0499	2.1042	1.7838	1.5458	1.7718
29	Adjusted Projected SC Retail Sales kwhs(w/o solar)		1,617,313,962	1,708,606,495	1,838,390,333	1,977,673,029	2,114,032,235	1,985,123,379	21,813,964,237
30	SC Base Fuel Costs	Line 28 * Line 29 / 100	\$ 26,791,903	\$ 28,917,455	\$ 37,684,773	\$ 41,614,207	\$ 37,710,747	\$ 30,686,950	\$ 386,200,473
31	Assign 100% of Avoided Fuel Benefit of SC NEM <sup>(Note 1)</sup>		(172,230)	(171,852)	(173,003)	(170,586)	(165,902)	(162,484)	(1,921,959)
32	Adjusted SC Base Fuel Costs	Line 30 + Line 31	\$ 26,619,673	\$ 28,745,602	\$ 37,511,770	\$ 41,443,621	\$ 37,544,844	\$ 30,524,465	\$ 384,278,514
<b>Projected SC Retail Sales kWh (October 2018 - September 2019)</b>									
33	Residential								6,580,779,714
34	General Service/Lighting								5,838,912,144
35	Industrial								9,256,345,589
36	Total SC	Sum Lines 33 through 35							21,676,037,448
37	SC Base Fuel Rate (cents / kWh)	Line 32 / Line 36 * 100							1.7728

Note 1 - Equals total NEM avoided fuel benefit less portion included in DERP NEM Incentive.

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY - RESIDENTIAL  
ACTUAL COSTS AND REVENUES JUNE 2017 - MAY 2018

Line No.		2016 Firm Coincident Peak CP %	Residential	2017 Firm Coincident Peak CP %	Residential
1			42.11%		38.84%
2					

Line No.	Description	Reference	June 2017	July 2017	August 2017	September 2017	October 2017	November 2017
3	Total Reagents		\$ 2,309,719	\$ 3,512,201	\$ 3,459,379	\$ 2,208,332	\$ 1,636,146	\$ 1,426,552
4	Emission Allowances		(172,533)	529	748	723	(4,667)	350
5	Off-System Sales		(90,659)	(59,768)	(63,757)	(31,721)	(14,835)	(1,203)
6	Net Environmental Costs	Sum Lines 3 thru 5	\$ 2,046,527	\$ 3,452,962	\$ 3,396,370	\$ 2,177,334	\$ 1,616,644	\$ 1,425,699
7	Total System KWH Sales	Exhibit 2	7,382,797,262	8,213,697,211	8,242,499,300	7,632,543,035	6,668,383,285	6,410,573,998
8	Environmental System Costs Incurred (¢ per Kwh)	Line 6 / Line 7 * 100	0.0277	0.0420	0.0412	0.0285	0.0242	0.0222
9	SC Retail Sales KWh	Exhibit 2	1,840,787,327	2,004,626,644	2,045,712,681	1,907,259,402	1,664,779,554	1,604,311,093
10	SC Environmental Costs	Line 8 * Line 9 / 100	\$ 510,270	\$ 842,726	\$ 842,948	\$ 544,084	\$ 403,599	\$ 356,796
11	Residential Environmental Cost Allocated by Firm CP	Line 10 * Line 2	\$ 214,852	\$ 354,835	\$ 354,929	\$ 229,090	\$ 169,938	\$ 150,231
12	SC Residential KWh Sales		527,907,707	665,587,625	663,376,599	570,214,307	441,642,074	411,775,311
13	SC Residential Environmental Cost Incurred (¢ per Kwh)	Line 11 / Line 12 * 100	0.0407	0.0533	0.0535	0.0402	0.0385	0.0365
14	SC Residential Environmental Cost Billed (¢ per Kwh)	Company records	0.0237	0.0237	0.0237	0.0237	0.0277	0.0331
15	SC Residential Environmental Costs (Over) / Under Recovery	(-Line 14 + Line 13)*Line 12 /100	\$ 89,738	\$ 197,091	\$ 197,709	\$ 93,949	\$ 47,728	\$ 14,131
16	(Over) / Under Cumulative Balance May 2017	Prior Year Annual Filing	\$ (1,849,965)					
17	Accounting Adjustment(s)							
18	Cumulative SC Residential Environmental Costs (Over) / Under Recovery	Line 15 + Line 17 + Prior Month Cum Bal	\$ (1,760,227)	\$ (1,563,136)	\$ (1,365,426)	\$ (1,271,477)	\$ (1,223,749)	\$ (1,209,619)

Line No.	Description	Reference	December 2017	January 2018	February 2018	March 2018	April 2018	May 2018	Twelve Months Ended May 2018
19	Total Reagents		\$ 1,416,918	\$ 4,250,962	\$ 1,514,324	\$ 1,605,428	\$ 1,382,386	\$ 2,249,663	\$ 26,972,010
20	Emission Allowances		828	384	583	4,193	330	(43,802)	(212,334)
21	Off-System Sales		(7,727)	(20,446)	(41,662)	(16,082)	(16,396)	(21,941)	(386,198)
22	Net Environmental Costs	Sum Lines 19 thru 21	\$ 1,410,019	\$ 4,230,900	\$ 1,473,245	\$ 1,593,538	\$ 1,366,320	\$ 2,183,920	\$ 26,373,478
23	Total System KWH Sales	Exhibit 2	7,057,410,509	8,697,594,873	7,453,819,034	6,443,723,578	6,581,829,396	6,581,962,808	87,366,834,289
24	Environmental System Costs Incurred (¢ per Kwh)	Line 22 / Line 23 * 100	0.0200	0.0486	0.0198	0.0247	0.0208	0.0332	
25	SC Retail Sales KWh	Exhibit 2	1,689,291,924	2,004,246,555	1,791,706,347	1,524,004,658	1,584,758,862	1,640,451,950	21,301,936,997
26	SC Environmental Costs	Line 24 * Line 25/ 100	\$ 337,508	\$ 974,955	\$ 354,130	\$ 376,887	\$ 328,980	\$ 544,308	\$ 6,417,192
27	Residential Environmental Cost Allocated by Firm CP	Line 26 * Line 2	\$ 142,110	\$ 378,686	\$ 137,549	\$ 146,388	\$ 127,780	\$ 211,417	\$ 2,617,805
28	SC Residential KWh Sales		547,216,632	825,188,829	610,886,058	439,248,457	436,659,749	409,696,777	6,549,400,125
29	SC Residential Environmental Cost Incurred (¢ per Kwh)	Line 27 / Line 28 * 100	0.0260	0.0459	0.0225	0.0333	0.0293	0.0516	
30	SC Residential Environmental Cost Billed (¢ per Kwh)	Company records	0.0331	0.0331	0.0331	0.0331	0.0331	0.0331	
31	SC Residential Environmental Costs (Over) / Under Recovery	(-Line 30 + Line 29)*Line 28 /100	\$ (39,019)	\$ 105,548	\$ (64,654)	\$ 997	\$ (16,754)	\$ 75,807	\$ 702,271
32	Accounting Adjustment(s)								-
33	Cumulative SC Residential Environmental Costs (Over) / Under Recovery	Line 31 + Line 32 + Prior Month Cum Bal	\$ (1,248,638)	\$ (1,143,089)	\$ (1,207,744)	\$ (1,206,747)	\$ (1,223,501)	\$ (1,147,694)	\$ (1,147,694)

**DUKE ENERGY CAROLINAS, LLC**

**SOUTH CAROLINA RETAIL FUEL CASE**  
**CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY - RESIDENTIAL**  
**ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2018**

[illegible]

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY - GENERAL SERVICE/LIGHTING  
ACTUAL COSTS AND REVENUES JUNE 2017 - MAY 2018

Line No.	Description	2016 Firm Coincident Peak CP %		General Service / Lighting		2017 Firm Coincident Peak CP %		General Service / Lighting	
		27.93%				28.22%			
Line No.	Description	Reference	June 2017	July 2017	August 2017	September 2017	October 2017	November 2017	
3	Total Reagents		\$ 2,309,719	\$ 3,512,201	\$ 3,459,379	\$ 2,208,332	\$ 1,636,146	\$ 1,426,552	
4	Emission Allowances		(172,533)	529	748	723	(4,667)	350	
5	Off-System Sales		(90,659)	(59,768)	(63,757)	(31,721)	(14,835)	(1,203)	
6	Net Environmental Costs	Sum Lines 3 thru 5	\$ 2,046,527	\$ 3,452,962	\$ 3,396,370	\$ 2,177,334	\$ 1,616,644	\$ 1,425,699	
7	Total System KWH Sales	Exhibit 2	7,382,797,262	8,213,697,211	8,242,499,300	7,632,543,035	6,668,383,285	6,410,573,998	
8	Environmental System Costs Incurred (\$ per Kwh)	Line 6 / Line 7 * 100	0.0277	0.0420	0.0412	0.0285	0.0242	0.0222	
9	SC Retail Sales KWh	Exhibit 2	1,840,787,327	2,004,626,644	2,045,712,681	1,907,259,402	1,664,779,554	1,604,311,093	
10	SC Environmental Costs	Line 8 * Line 9 / 100	\$ 510,270	\$ 842,726	\$ 842,948	\$ 544,084	\$ 403,599	\$ 356,796	
11	General Service / Lighting Environmental Cost Allocated by Firm CP	Line 10 * Line 2	\$ 142,542	\$ 235,412	\$ 235,474	\$ 151,987	\$ 112,744	\$ 99,669	
12	SC General Service / Lighting kWh Sales		506,172,821	540,981,553	550,338,633	535,402,529	460,342,322	429,859,995	
13	SC General Service / Lighting Environmental Cost Incurred (\$ per Kwh)	Line 11 / Line 12 * 100	0.0282	0.0435	0.0428	0.0284	0.0245	0.0232	
14	SC General Service / Lighting Environmental Cost Billed (\$ per Kwh)	Company records	0.0065	0.0065	0.0065	0.0065	0.0213	0.0413	
15	SC General Service / Lighting Environmental Costs (Over) / Under Recovery	(-Line 14 + Line 13)*Line 12 /100	\$ 109,641	\$ 200,248	\$ 199,702	\$ 117,186	\$ 14,743	\$ (77,957)	
16	(Over) / Under Cumulative Balance May 2017	Prior Year Annual Filing	\$ (462,545)						
17	Accounting Adjustment(s)								
18	Cumulative SC General Service / Lighting Environmental Costs (Over) / Under Recovery	Line 15 + Line 17 + Prior Month Cum Bal	\$ (352,904)	\$ (152,656)	\$ 47,046	\$ 164,232	\$ 178,975	\$ 101,017	
Line No.	Description	Reference	December 2017	January 2018	February 2018	March 2018	April 2018	May 2018	Twelve Months Ended May 2018
19	Total Reagents		\$ 1,416,918	\$ 4,250,962	\$ 1,514,324	\$ 1,605,428	\$ 1,382,386	\$ 2,249,663	\$ 26,972,010
20	Emission Allowances		828	384	583	4,193	330	(43,802)	(212,334)
21	Off-System Sales		(7,727)	(20,446)	(41,662)	(16,082)	(16,396)	(21,941)	(386,198)
22	Net Environmental Costs	Sum Lines 19 thru 21	\$ 1,410,019	\$ 4,230,900	\$ 1,473,245	\$ 1,593,538	\$ 1,366,330	\$ 2,183,920	\$ 26,373,478
23	Total System KWH Sales	Exhibit 2	7,057,410,509	8,697,594,873	7,453,819,034	6,443,723,578	6,581,829,396	6,581,962,808	87,366,834,289
24	Environmental System Costs Incurred (\$ per Kwh)	Line 22 / Line 23* 100	0.0200	0.0486	0.0198	0.0247	0.0208	0.0332	
25	SC Retail Sales kWh	Exhibit 2	1,689,291,924	2,004,246,555	1,791,706,347	1,524,004,658	1,584,758,862	1,640,451,950	21,301,936,997
26	SC Environmental Costs	Line 24 * Line 25/ 100	\$ 337,508	\$ 974,955	\$ 354,130	\$ 376,888	\$ 328,979	\$ 544,308	\$ 6,417,192
27	General Service / Lighting Environmental Cost Allocated by Firm CP	Line 26 * Line 2	\$ 94,281	\$ 275,146	\$ 99,941	\$ 106,363	\$ 92,843	\$ 153,611	\$ 1,800,012
28	SC General Service / Lighting kWh Sales		433,568,983	495,802,604	455,308,603	406,753,337	419,580,867	444,529,906	5,678,642,153
29	SC General Service / Lighting Environmental Cost Incurred (\$ per Kwh)	Line 27 / Line 28 * 100	0.0217	0.0555	0.0220	0.0261	0.0221	0.0346	
30	SC General Service / Lighting Environmental Cost Billed (\$ per Kwh)	Company Records	0.0415	0.0415	0.0415	0.0415	0.0415	0.0415	
31	SC General Service / Lighting Environmental Costs (Over) / Under Recovery	(-Line 30 + Line 29)*Line 28 /100	\$ (85,650)	\$ 69,388	\$ (89,012)	\$ (62,440)	\$ (81,283)	\$ (30,869)	\$ 283,697
32	Accounting Adjustment(s)								
33	Cumulative SC General Service / Lighting Environmental Costs (Over) / Under Recovery	Line 31 + Line 32 + Prior Month Cum Bal	\$ 15,368	\$ 84,756	\$ (4,256)	\$ (66,695)	\$ (147,979)	\$ (178,848)	\$ (178,848)

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY-GENERAL SERVICE/ LIGHTING  
ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2018

Line No.		2016 Firm Coincident Peak CP %	General Service / Lighting	2017 Firm Coincident Peak CP %	General Service / Lighting				
						Estimated June 2018	Estimated July 2018	Estimated August 2018	Estimated September 2018
1									
2		2016 Firm Coincident Peak CP %	27.93%	2017 Firm Coincident Peak CP %	28.22%				
Line No.	Description	Reference							
34	Total Reagents		\$ 2,586,832	\$ 3,204,310	\$ 2,978,617	\$ 1,978,964			
35	Emission Allowances		576	712	644	430			
36	Off-System Sales		(10,786)	(31,105)	(42,519)	(23,963)			
37	Net Environmental Costs	Sum lines 34 thru 36	\$ 2,576,621	\$ 3,173,917	\$ 2,936,743	\$ 1,955,432			
38	Total Projected System Sales kWhs (w/solar)		7,397,566,722	8,220,497,571	8,409,562,198	7,994,793,000			
39	Environmental System Costs Incurred (¢ per kWh)	Line 37 / Line 38* 100	0.0348	0.0386	0.0349	0.0245			
40	Projected SC Retail Sales kWh		1,829,860,637	1,979,919,610	2,053,956,924	1,986,163,127			
41	SC Environmental Costs	Line 39 * Line 40/ 100	\$ 637,353	\$ 764,443	\$ 717,272	\$ 485,792			
42	General Service / Lighting Environmental Cost Allocated by Firm CP	Line 41 * Line 2	\$ 179,870	\$ 215,737	\$ 202,424	\$ 137,097			
43	SC Projected General Service / Lighting kWh Sales		504,947,004	544,523,558	556,952,933	556,543,499			
44	SC General Service / Lighting Environmental Cost Incurred (¢ per kWh)	Line 42 / Line 43 * 100	0.0356	0.0396	0.0363	0.0246			
45	SC General Service / Lighting Environmental Cost Billed (¢ per kWh)	Docket No. 2017-3-E	0.0415	0.0415	0.0415	0.0415			
46	SC General Service / Lighting Environmental Costs (Over) / Under Recovery	(-Line 45 + Line 44) * Line 43 /100	\$ (29,683)	\$ (10,241)	\$ (28,711)	\$ (93,868)			
47	Cumulative SC General Service / Lighting Environmental Costs (Over) / Under Recovery	Line 46 + Prior Month Cum Bal	\$ (208,531)	\$ (218,772)	\$ (247,483)	\$ (341,351)			
48	SC Projected General Service / Lighting Sales (October 2018 - September 2019)	Exhibit 3				5,838,912,144			
49	SC General Service / Lighting Environmental Increment / (Decrement) (¢ per kWh)	Line 47 / Line 48 * 100				(0.0058)			



DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY-INDUSTRIAL  
ACTUAL COSTS AND REVENUES JUNE 2017 - MAY 2018

Line No.		2016 Firm Coincident Peak CP %	Industrial	2017 Firm Coincident Peak CP %	Industrial				
1			29.96%		32.94%				
2									
Line No.	Description	Reference	June 2017	July 2017	August 2017	September 2017	October 2017	November 2017	
3	Total Reagents		\$ 2,309,719	\$ 3,512,201	\$ 3,459,379	\$ 2,208,332	\$ 1,636,146	\$ 1,426,552	
4	Emission Allowances		(172,533)	529	748	723	(4,667)	350	
5	Off-System Sales		(90,659)	(59,768)	(63,757)	(31,721)	(14,835)	(1,203)	
6	Net Environmental Costs	Sum Lines 3 thru 5	\$ 2,046,527	\$ 3,452,962	\$ 3,396,370	\$ 2,177,334	\$ 1,616,644	\$ 1,425,699	
7	Total System KWH Sales	Exhibit 2	7,382,797,262	8,213,697,211	8,242,499,300	7,632,543,035	6,668,383,285	6,410,573,998	
8	Environmental System Costs Incurred (¢ per Kwh)	Line 6 / Line 7 * 100	0.0277	0.0420	0.0412	0.0285	0.0242	0.0222	
9	SC Retail Sales KWh	Exhibit 2	1,840,787,327	2,004,626,644	2,045,712,681	1,907,259,402	1,664,779,554	1,604,311,093	
10	SC Environmental Costs	Line 8 * Line 9 / 100	\$ 510,270	\$ 842,726	\$ 842,948	\$ 544,084	\$ 403,599	\$ 356,796	
11	Industrial Environmental Cost Allocated by Firm CP	Line 10 * Line 2	\$ 152,876	\$ 252,479	\$ 252,546	\$ 163,006	\$ 120,918	\$ 106,895	
12	SC Industrial KWh Sales		806,706,799	798,057,466	831,997,449	801,642,566	762,795,158	762,675,787	
13	SC Industrial Environmental Cost Incurred (¢ per Kwh)	Line 11 / Line 12 * 100	0.0190	0.0316	0.0304	0.0203	0.0159	0.0140	
14	SC Industrial Environmental Cost Billed (¢ per Kwh)	Company Records	0.0006	0.0006	0.0006	0.0006	0.0116	0.0266	
15	SC Industrial Environmental Costs (Over) / Under Recovery (Over) / Under Cumulative Balance May 2017	(-Line 14 + Line 13)*Line 12 /100	\$ 148,036	\$ 247,691	\$ 247,554	\$ 158,196	\$ 32,219	\$ (95,726)	
16	Accounting Adjustment(s)	Prior Year Annual Filing	\$ (673,176)						
17	Cumulative SC Industrial Environmental Costs (Over) / Under Recovery	Line 15 + Line 17 + Prior Month Cum Bal	\$ (525,140)	\$ (277,449)	\$ (29,896)	\$ 128,300	\$ 160,518	\$ 64,792	
18									
Line No.	Description	Reference	December 2017	January 2018	February 2018	March 2018	April 2018	May 2018	Twelve Months Ended May 2018
19	Total Reagents		\$ 1,416,918	\$ 4,250,962	\$ 1,514,324	\$ 1,605,428	\$ 1,382,386	\$ 2,249,663	\$ 26,972,010
20	Emission Allowances		828	384	583	4,193	330	(43,802)	(212,334)
21	Off-System Sales		(7,727)	(20,446)	(41,662)	(16,082)	(16,396)	(21,941)	(386,198)
22	Net Environmental Costs	Sum Lines 19 thru 21	\$ 1,410,019	\$ 4,230,900	\$ 1,473,245	\$ 1,593,538	\$ 1,366,320	\$ 2,183,920	\$ 26,373,478
23	Total System KWH Sales	Exhibit 2	7,057,410,509	8,697,594,873	7,453,819,034	6,443,723,578	6,581,829,396	6,581,962,808	87,366,834,289
24	Environmental System Costs Incurred (¢ per Kwh)	Line 22 / Line 23 * 100	0.0200	0.0486	0.0198	0.0247	0.0208	0.0332	
25	SC Retail Sales KWh	Exhibit 2	1,689,291,924	2,004,246,555	1,791,706,347	1,524,004,658	1,584,758,862	1,640,451,950	21,301,936,997
26	SC Environmental Costs	Line 24 * Line 25/ 100	\$ 337,508	\$ 974,955	\$ 354,130	\$ 376,888	\$ 328,979	\$ 544,308	\$ 6,417,192
27	Industrial Environmental Cost Allocated by Firm CP	Line 26 * Line 2	\$ 101,117	\$ 321,123	\$ 116,641	\$ 124,136	\$ 108,357	\$ 179,280	\$ 1,999,375
28	SC Industrial KWh Sales		708,506,309	683,255,122	725,511,686	678,002,864	728,518,246	786,225,267	9,073,894,719
29	SC Industrial Environmental Cost Incurred (¢ per Kwh)	Line 27 / Line 28 * 100	0.0143	0.0470	0.0161	0.0183	0.0149	0.0228	
30	SC Industrial Environmental Cost Billed (¢ per Kwh)	Company Records	0.0267	0.0267	0.0267	0.0267	0.0267	0.0267	0.0267
31	SC Industrial Environmental Costs (Over) / Under Recovery Accounting Adjustment(s)	(-Line 30 + Line 29)*Line 28 /100	\$ (88,054)	\$ 138,694	\$ (77,071)	\$ (56,891)	\$ (86,157)	\$ (30,642)	\$ 537,847
32									
33	Cumulative SC Industrial Environmental Costs (Over) / Under Recovery	Line 31 + Line 32 + Prior Month Cum Bal	\$ (23,262)	\$ 115,432	\$ 38,361	\$ (18,530)	\$ (104,687)	\$ (135,329)	\$ (135,329)

**DUKE ENERGY CAROLINAS, LLC**  
**SOUTH CAROLINA RETAIL FUEL CASE**  
**CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY-INDUSTRIAL**  
**ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2018**

Line No.	Description	Reference	2016 Firm Coincident Peak CP %				2017 Firm Coincident Peak CP %			
			Industrial 29.96%				Industrial 32.94%			
			Estimated June 2018	Estimated July 2018	Estimated August 2018	Estimated September 2018				
34	Total Reagents		\$ 2,586,832	\$ 3,204,310	\$ 2,978,617	\$ 1,978,964				
35	Emission Allowances		576	712	644	430				
36	Off-System Sales		(10,786)	(31,105)	(42,519)	(23,963)				
37	Net Environmental Costs	Sum Lines 34 thru 36	\$ 2,576,621	\$ 3,173,917	\$ 2,936,743	\$ 1,955,432				
38	Total Projected System Sales kWhs w/solar		7,397,566,722	8,220,497,571	8,409,562,198	7,994,793,000				
39	Environmental System Costs Incurred (¢ per Kwh)	Line 37 / Line 38* 100	0.0348	0.0386	0.0349	0.0245				
40	Projected SC Retail Sales kWh		1,829,860,637	1,979,919,610	2,053,956,924	1,986,163,127				
41	SC Environmental Costs	Line 39 * Line 40/ 100	\$ 637,353	\$ 764,443	\$ 717,272	\$ 485,792				
42	Industrial Environmental Cost Allocated by Firm CP	Line 41 * Line 2	\$ 209,926	\$ 251,786	\$ 236,250	\$ 160,007				
43	SC Projected Industrial kWh Sales		809,957,328	796,995,291	851,456,524	839,231,906				
44	SC Industrial Environmental Cost Incurred (¢ per Kwh)	Line 42 / Line 43 * 100	0.0259	0.0316	0.0277	0.0191				
45	SC Industrial Environmental Cost Billed (¢ per Kwh)	Docket No. 2017-3-E	0.0267	0.0267	0.0267	0.0267				
46	SC Industrial Environmental Costs (Over) / Under Recovery	(-Line 45 + Line 44)*Line 43 /100	\$ (6,332)	\$ 38,989	\$ 8,911	\$ (64,068)				
47	Cumulative SC Industrial Environmental Costs (Over) / Under Recovery	Line 46 + Prior Month Cum Bal	\$ (141,661)	\$ (102,672)	\$ (93,762)	\$ (157,830)				
48	SC Projected Industrial Sales (October 2018 - September 2019)	Exhibit 3				9,256,345,589				
49	SC Industrial Environmental Increment / (Decrement) (¢ per Kwh)	Line 47 / Line 48 * 100				(0.0017)				

**DUKE ENERGY CAROLINAS, LLC**  
**SOUTH CAROLINA RETAIL FUEL CASE**  
**PROJECTED BILLING PERIOD ENVIRONMENTAL COSTS**  
**FOR THE 12 MONTHS ENDING OCTOBER 1, 2018 TO SEPTEMBER 30, 2019**

Line No.	Class	2017 Firm Coincident Peak (CP) KWS	CP %
1	Residential	1,617,566	38.84%
2	General Service / Lighting	1,175,294	28.22%
3	Industrial	1,371,687	32.94%
	Total SC	4,164,547	100.00%

Line No.	Description	Reference	October 2018	November 2018	December 2018	January 2019	February 2019	March 2019
4	Total Reagents		\$ 1,304,820	\$ 950,465	\$ 2,170,310	\$ 3,562,820	\$ 3,033,309	\$ 1,371,183
5	Emission Allowances		293	218	458	760	654	311
6	Estimated Off-system Sales		(4,499)	(3,771)	(18,388)	(136,972)	(131,362)	(59,433)
7	Net Environmental Costs	Sum Lines 4 through 6	\$ 1,300,615	\$ 946,913	\$ 2,152,379	\$ 3,426,609	\$ 2,902,602	\$ 1,312,061
8	Total Projected System Sales kwhs (w/solar)	Exhibit 3	6,499,954,760	6,602,598,785	7,160,709,598	8,082,286,102	7,579,000,897	6,739,338,881
9	Environmental System Costs Incurred (¢ per Kwh)	Line 7 / Line 8 *100	0.0200	0.0143	0.0301	0.0424	0.0383	0.0195
10	Projected SC Retail Sales kWh (October 2018 - September 2019; Exhibit 3		1,642,461,420	1,645,838,456	1,719,824,102	1,930,817,460	1,879,057,152	1,689,772,083
11	SC Environmental Costs	Line 9 * Line 10 /100	\$ 328,650	\$ 236,038	\$ 516,948	\$ 818,600	\$ 719,640	\$ 328,977

Line No.	Description	Reference	April 2019	May 2019	June 2019	July 2019	August 2019	September 2019	12 Month Total
12	Total Reagents		\$ 892,752	\$ 751,706	\$ 1,775,855	\$ 2,520,448	\$ 2,112,800	\$ 1,099,993	\$ 21,546,462
13	Emission Allowances		207	176	438	630	531	270	4,948
14	Estimated Off-system Sales		(5,194)	(11,656)	(10,473)	(31,931)	(28,704)	(11,819)	(454,200)
15	Net Environmental Costs	Sum Lines 12 thru 14	\$ 887,766	\$ 740,226	\$ 1,765,820	\$ 2,489,148	\$ 2,084,627	\$ 1,088,444	\$ 21,097,210
16	Total Projected System Sales kwhs (w/solar)	Exhibit 3	6,290,451,974	6,684,011,828	7,271,666,889	8,039,482,276	8,522,431,399	7,846,096,714	87,318,030,105
17	Environmental System Costs Incurred (¢ per Kwh)	Line 15 / Line 16 *100	0.0141	0.0111	0.0243	0.0310	0.0245	0.0139	
18	Projected SC Retail Sales kWh (October 2018 - September 2019; Exhibit 3		1,604,962,893	1,696,282,308	1,825,984,128	1,965,438,990	2,102,131,923	1,973,466,533	21,676,037,448
19	SC Environmental Costs	Line 17 * Line 18 /100	\$ 226,507	\$ 187,856	\$ 443,414	\$ 608,530	\$ 514,191	\$ 273,768	\$ 5,203,119
<b>SC Environmental Costs Allocated on Firm CP kWs</b>									
20	Residential	Total Line 19 * Line 1							\$ 2,020,961
21	General Service / Lighting	Total Line 19 * Line 2							\$ 1,468,394
22	Industrial	Total Line 19 * Line 3							\$ 1,713,764
23	Total SC	Sum Lines 20 through 22							\$ 5,203,119

<b>Projected SC Retail Sales kWh (October 2018 - September 2019)</b>									
24	Residential	Exhibit 3							6,580,779,714
25	General Service / Lighting	Exhibit 3							5,838,912,144
26	Industrial	Exhibit 3							9,256,345,589
27	Total SC	Sum Lines 24 through 26							21,676,037,448

<b>SC Environmental Costs ¢/kWh</b>									
28	Residential	Line 20 / Line 24 * 100							0.0307
29	General Service / Lighting	Line 21 / Line 25 * 100							0.0251
30	Industrial	Line 22 / Line 26 * 100							0.0185

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
PURPA PURCHASED POWER CAPACITY COSTS (OVER) / UNDER RECOVERY  
CALCULATION OF CAPACITY RELATED COSTS (OVER) / UNDER RECOVERY - RESIDENTIAL  
ACTUAL COSTS AND REVENUES JUNE 2017 - MAY 2018

Line No.	2016 Firm Coincident Peak CP %			2017 Firm Coincident Peak CP %					
1		Residential	42.11%			Residential			
						38.84%			
Line No.	Description	Reference	June 2017	July 2017	August 2017	September 2017	October 2017	November 2017	
2	Total PURPA Purchased Power Capacity Costs		\$ 2,189,400	\$ 6,535,280	\$ 6,524,417	\$ 3,690,328	\$ 2,965,616	\$ 1,128,821	
3	Firm Natural Gas Transportation and Storage Costs						3,156,576	2,872,247	
4	Total Capacity Related Costs	Line 2 + Line 3	\$ 2,189,400	\$ 6,535,280	\$ 6,524,417	\$ 3,690,328	\$ 6,122,192	\$ 4,001,068	
5	Total System kWh Sales	Exhibit 2	7,382,797,262	8,213,697,211	8,242,499,300	7,632,543,035	6,668,383,285	6,410,573,998	
6	Capacity Related System Costs Incurred (c/kWh)	Line 4 / Line 5 * 100	0.0297	0.0796	0.0792	0.0483	0.0918	0.0624	
7	SC Retail Sales kWh	Exhibit 2	1,840,787,327	2,004,626,644	2,045,712,681	1,907,259,402	1,664,779,554	1,604,311,093	
8	SC Capacity Related Cost Incurred	Line 6 * Line 7 / 100	\$ 545,893	\$ 1,594,994	\$ 1,619,300	\$ 922,158	\$ 1,528,421	\$ 1,001,308	
9	Residential Capacity Related Cost Allocated by Firm CP	Line 8 * Line 1	\$ 229,852	\$ 671,582	\$ 681,817	\$ 388,281	\$ 643,552	\$ 421,607	
10	SC Residential kWh Sales		527,907,707	665,587,625	663,376,599	570,214,307	441,642,074	411,775,311	
11	SC Residential Capacity Related Cost Incurred (c/kWh)	Line 9 / Line 10 * 100	0.0435	0.1009	0.1028	0.0681	0.1457	0.1024	
12	SC Residential Billed (c/kWh)	Company Records	0.0797	0.0797	0.0797	0.0797	0.0960	0.1181	
13	SC Capacity Related (Over) / Under Recovery	(-Line 12 + Line 11)* Line 10 / 100	\$ (190,890)	\$ 141,109	\$ 153,106	\$ (66,180)	\$ 219,532	\$ (64,714)	
14	(Over) / Under Cumulative Balance May 2017	Prior Year Annual Filing	\$ 386,095						
15	Cumulative SC Residential Capacity Related (Over) / Under Recovery	Line 13 + Prior Month Cum Bal	\$ 195,205	\$ 336,314	\$ 489,420	\$ 423,240	\$ 642,772	\$ 578,058	
Line No.	Description	Reference	December 2017	January 2018	February 2018	March 2018	April 2018	May 2018	Twelve Months Ended May 2018
16	Total PURPA Purchased Power Capacity Costs		\$ 848,469	\$ 1,196,326	\$ 1,251,488	\$ 1,048,160	\$ 1,126,843	\$ 1,089,472	\$ 29,594,620
17	Firm Natural Gas Transportation and Storage Costs		2,358,419	2,439,779	2,434,128	3,043,138	4,169,903	3,635,827	24,110,017
18	Total Capacity Related Costs	Line 16 + Line 17	\$ 3,206,888	\$ 3,636,105	\$ 3,685,616	\$ 4,091,298	\$ 5,296,747	\$ 4,725,299	\$ 53,704,637
19	Total System kWh Sales	Exhibit 2	7,057,410,509	8,697,594,873	7,453,819,034	6,443,723,578	6,581,829,396	6,581,962,808	87,366,834,289
20	Capacity Related System Costs Incurred (c/kWh)	Line 18 / Line 19* 100	0.0454	0.0418	0.0494	0.0635	0.0805	0.0718	
21	SC Retail Sales kWh	Exhibit 2	1,689,291,924	2,004,246,555	1,791,706,347	1,524,004,658	1,584,758,862	1,640,451,950	21,301,936,997
22	SC Capacity Related Cost Incurred	Line 20 * Line 21 / 100	\$ 767,614	\$ 837,893	\$ 885,927	\$ 967,632	\$ 1,275,340	\$ 1,177,707	\$ 13,124,189
23	Residential PURPA Capacity Related Cost Allocated by Firm CP	Line 22 * Line 1	\$ 323,209	\$ 325,449	\$ 344,106	\$ 375,841	\$ 495,359	\$ 457,437	\$ 5,358,092
24	SC Residential kWh Sales		547,216,632	825,188,829	610,886,058	439,248,457	436,659,749	409,696,777	6,549,400,125
25	SC Residential Capacity Related Cost Incurred (c/kWh)	Line 23 / Line 24 * 100	0.0591	0.0394	0.0563	0.0856	0.1134	0.1117	
26	SC Residential Billed (c/kWh)	Company Records	0.1183	0.1183	0.1183	0.1183	0.1183	0.1183	
27	SC Capacity Related (Over) / Under Recovery	(-Line 26 + Line 25)*Line 24 / 100	\$ (324,148)	\$ (650,749)	\$ (378,572)	\$ (143,790)	\$ (21,209)	\$ (27,234)	\$ (1,353,739)
28	Cumulative SC Residential Capacity Related (Over) / Under Recovery	Line 27 + Prior Month Cum Bal	\$ 253,910	\$ (396,839)	\$ (775,411)	\$ (919,201)	\$ (940,410)	\$ (967,644)	\$ (967,644)

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE  
PURPA PURCHASED POWER CAPACITY COSTS (OVER) / UNDER RECOVERY  
CALCULATION OF CAPACITY RELATED COSTS (OVER) / UNDER RECOVERY - RESIDENTIAL  
ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2018

Line No.		2016 Firm Coincident Peak CP %	Residential	2017 Firm Coincident Peak CP %		Residential
1			42.11%			38.84%
Line No.	Description	Reference	Estimated June 2018	Estimated July 2018	Estimated August 2018	Estimated September 2018
29	Total PURPA Purchased Power Capacity Costs		\$ 2,553,717	\$ 3,517,004	\$ 3,341,130	\$ 2,076,724
30	Firm Natural Gas Transportation and Storage Costs		4,758,845	4,466,654	4,538,367	5,220,184
31	Total Capacity Related Costs	Line 29 + Line 30	\$ 7,312,562	\$ 7,983,658	\$ 7,879,496	\$ 7,296,908
32	Total System kWh Sales	Exhibit 2	7,397,566,722	8,220,497,571	8,409,562,198	7,994,793,000
33	Capacity Related System Costs Incurred (c/kWh)	Line 31 / Line 32 * 100	0.0989	0.0971	0.0937	0.0913
34	SC Retail Sales kWh	Exhibit 2	1,829,860,637	1,979,919,610	2,053,956,924	1,986,163,127
35	SC Capacity Related Cost Incurred	Line 33 * Line 34 / 100	\$ 1,808,834	\$ 1,922,876	\$ 1,924,493	\$ 1,812,786
36	Residential Capacity Related Cost Allocated by Firm CP	Line 35 * Line 1	\$ 702,575	\$ 746,871	\$ 747,499	\$ 704,111
37	SC Projected Residential kWh Sales		514,956,305	638,400,761	645,547,468	590,387,723
38	SC Residential Capacity Related Cost Incurred (c/kWh)	Line 36 / Line 37 * 100	0.1364	0.1170	0.1158	0.1193
39	SC Residential Billed (c/kWh)	Docket No. 2017-3-E	0.1183	0.1183	0.1183	0.1183
40	SC Capacity Related (Over) / Under Recovery	(-Line 39 + Line 38) * Line 37 / 100	\$ 93,382	\$ (8,357)	\$ (16,184)	\$ 5,682
41	Cumulative SC Residential Capacity Related (Over) / Under Recovery	Line 40 + Prior Month Cum Bal	\$ (874,262)	\$ (882,619)	\$ (898,803)	\$ (893,121)
42	SC Projected Residential Sales (October 2018-September 2019)	Exhibit 3				6,580,779,714
43	SC Residential Capacity Related Increment / (Decrement) (c/kWh)	Line 41 / Line 42 * 100				(0.0136)

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
PURPA PURCHASED POWER CAPACITY COSTS (OVER) / UNDER RECOVERY  
CALCULATION OF CAPACITY RELATED COSTS (OVER) / UNDER RECOVERY - GENERAL SERVICE/ LIGHTING  
ACTUAL COSTS AND REVENUES JUNE 2017 - MAY 2018

Line No.		2016 Firm Coincident Peak CP %	General Service / Lighting		2017 Firm Coincident Peak CP %					General Service / Lighting	
1			27.93%							28.22%	
Line No.	Description	Reference	June 2017	July 2017	August 2017	September 2017	October 2017	November 2017			
2	Total PURPA Purchased Power Capacity Costs		\$ 2,189,400	\$ 6,535,280	\$ 6,524,417	\$ 3,690,328	\$ 2,965,616	\$ 1,128,821			
3	Firm Natural Gas Transportation and Storage Costs						\$ 3,156,576	\$ 2,872,247			
4	Total Capacity Related Costs	Line 2 + Line 3	\$ 2,189,400	\$ 6,535,280	\$ 6,524,417	\$ 3,690,328	\$ 6,122,192	\$ 4,001,068			
5	Total System kWh Sales	Exhibit 2									
6	Capacity Related System Costs Incurred (c/kWh)	Line 4 / Line 5 * 100	7,382,797,262	8,213,697,211	8,242,499,300	7,632,543,035	6,668,383,285	6,410,573,998			
7	SC Retail Sales kWh	Exhibit 2	0.0297	0.0796	0.0792	0.0483	0.0918	0.0624			
8	SC Capacity Related Cost Incurred	Line 6 * Line 7 / 100	1,840,787,327	2,004,626,644	2,045,712,681	1,907,259,402	1,664,779,554	1,604,311,093			
9	General Service / Lighting Capacity Related Cost Allocated by Firm CP	Line 8 * Line 1	\$ 545,893	\$ 1,594,994	\$ 1,619,300	\$ 922,158	\$ 1,528,421	\$ 1,001,308			
			\$ 152,493	\$ 445,554	\$ 452,344	\$ 257,601	\$ 426,958	\$ 279,711			
10	SC General Service / Lighting kWh Sales		506,172,821	540,981,553	550,338,633	535,402,529	460,342,322	429,859,995			
11	SC General Service / Lighting Capacity Related Cost Incurred (c/kWh)	Line 9 / Line 10 * 100	0.0301	0.0824	0.0822	0.0481	0.0927	0.0651			
12	SC General Service / Lighting Billed (c/kWh)	Company Records	0.0330	0.0330	0.0330	0.0330	0.0596	0.0956			
13	SC Capacity Related (Over) / Under Recovery	(-Line 12 + Line 11)* Line 10 / 100	\$ (14,544)	\$ 267,030	\$ 270,732	\$ 80,918	\$ 152,698	\$ (131,148)			
14	(Over) / Under Cumulative Balance May 2017	Prior Year Annual Filing	\$ 242,847								
15	Cumulative SC General Service / Lighting Capacity Related (Over) / Under Recovery	Line 13 + Prior Month Cum Bal	\$ 228,303	\$ 495,333	\$ 766,066	\$ 846,983	\$ 999,682	\$ 868,534			
Line No.	Description	Reference	December 2017	January 2018	February 2018	March 2018	April 2018	May 2018	Twelve Months Ended May 2018		
16	Total PURPA Purchased Power Capacity Costs		\$ 848,469	\$ 1,196,326	\$ 1,251,488	\$ 1,048,160	\$ 1,126,843	\$ 1,089,472	\$ 29,594,620		
17	Firm Natural Gas Transportation and Storage Costs		\$ 2,358,419	\$ 2,439,779	\$ 2,434,128	\$ 3,043,138	\$ 4,169,903	\$ 3,635,827	\$ 24,110,017		
18	Total Capacity Related Costs	Line 16 + Line 17	\$ 3,206,888	\$ 3,636,105	\$ 3,685,616	\$ 4,091,298	\$ 5,296,747	\$ 4,725,299	\$ 53,704,637		
19	Total System kWh Sales	Exhibit 2	7,057,410,509	8,697,594,873	7,453,819,034	6,443,723,578	6,581,829,396	6,581,962,808	87,366,834,289		
20	Capacity Related System Costs Incurred (c/kWh)	Line 18 / Line 19* 100	0.0454	0.0418	0.0494	0.0635	0.0805	0.0718			
21	SC Retail Sales kWh	Exhibit 2	1,689,291,924	2,004,246,555	1,791,706,347	1,524,004,658	1,584,758,862	1,640,451,950	21,301,936,997		
22	SC Capacity Related Cost Incurred	Line 20 * Line 21 / 100	\$ 767,614	\$ 837,893	\$ 885,927	\$ 967,633	\$ 1,275,339	\$ 1,177,707	\$ 13,124,189		
23	General Service / Lighting Capacity Related Cost Allocated by Firm CP	Line 22 * Line 1	\$ 214,430	\$ 236,465	\$ 250,021	\$ 273,080	\$ 359,919	\$ 332,366	\$ 3,680,940		
24	SC General Service / Lighting kWh Sales		433,568,983	495,802,604	455,308,603	406,753,337	419,580,867	444,529,906	5,678,642,153		
25	SC General Service / Lighting Capacity Related Cost Incurred (c/kWh)	Line 23 / Line 24 * 100	0.0495	0.0477	0.0549	0.0671	0.0858	0.0748			
26	SC General Service / Lighting Billed (c/kWh)	Company Records	0.0959	0.0959	0.0959	0.0959	0.0959	0.0959			
27	SC Capacity Related (Over) / Under Recovery	(-Line 26 + Line 25)*Line 24 / 100	\$ (201,363)	\$ (239,010)	\$ (186,620)	\$ (116,996)	\$ (42,459)	\$ (93,938)	\$ (254,699)		
28	Cumulative SC General Service / Lighting Capacity Related (Over) / Under Recovery	Line 27 + Prior Month Cum Bal	\$ 667,171	\$ 428,161	\$ 241,541	\$ 124,546	\$ 82,086	\$ (11,852)	\$ (11,852)		

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE  
PURPA PURCHASED POWER CAPACITY COSTS (OVER) / UNDER RECOVERY  
CALCULATION OF CAPACITY RELATED COSTS (OVER) / UNDER RECOVERY - GENERAL SERVICE/ LIGHTING  
ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2018

Line No.		2016 Firm Coincident Peak CP %	General Service / Lighting		2017 Firm Coincident Peak CP %	General Service / Lighting	
1		27.93%			28.22%		
Line No.	Description	Reference	Estimated June 2018	Estimated July 2018	Estimated August 2018	Estimated September 2018	
29	Total PURPA Purchased Power Capacity Costs		\$ 2,553,717	\$ 3,517,004	\$ 3,341,130	\$ 2,076,724	
30	Firm Natural Gas Transportation and Storage Costs		4,758,845	4,466,654	4,538,367	5,220,184	
31	Total Capacity Related Costs	Line 29 + Line 30	\$ 7,312,562	\$ 7,983,658	\$ 7,879,496	\$ 7,296,908	
32	Total System kWh Sales	Exhibit 2	7,397,566,722	8,220,497,571	8,409,562,198	7,994,793,000	
33	Capacity Related System Costs Incurred (c/kWh)	Line 31 / Line 32 * 100	0.0989	0.0971	0.0937	0.0913	
34	SC Retail Sales kWh	Exhibit 2	1,829,860,637	1,979,919,610	2,053,956,924	1,986,163,127	
35	SC Capacity Related Cost Incurred	Line 33 * Line 34 / 100	\$ 1,808,834	\$ 1,922,876	\$ 1,924,493	\$ 1,812,786	
36	General Service / Lighting Capacity Related Cost Allocated by Firm CP	Line 35 * Line 1	\$ 510,478	\$ 542,663	\$ 543,119	\$ 511,594	
37	SC General Service / Lighting kWh Sales		504,947,004	544,523,558	556,952,933	556,543,499	
38	SC General Service / Lighting Capacity Related Cost Incurred (c/kWh)	Line 36 / Line 37 * 100	0.1011	0.0997	0.0975	0.0919	
39	SC General Service / Lighting Billed (c/kWh)	Docket No. 2017-3-E	0.0959	0.0959	0.0959	0.0959	
40	SC Capacity Related (Over) / Under Recovery	(-Line 39 + Line 38)*Line 37 /100	\$ 26,234	\$ 20,465	\$ 9,001	\$ (22,131)	
41	Cumulative SC General Service / Lighting Capacity Related (Over) / Under Recovery	Line 40 + Prior Month Cum Bal	\$ 14,382	\$ 34,847	\$ 43,848	\$ 21,717	
42	SC Projected General Service / Lighting Sales (October 2018 - September 2019)	Exhibit 3				5,838,912,144	
43	SC General Service / Lighting Capacity Related Increment / (Decrement) (c/kWh)	Line 41 / Line 42 * 100				0.0004	

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
PURPA PURCHASED POWER CAPACITY COSTS (OVER) / UNDER RECOVERY  
CALCULATION OF CAPACITY RELATED COSTS (OVER) / UNDER RECOVERY - INDUSTRIAL  
ACTUAL COSTS AND REVENUES JUNE 2017 - MAY 2018

Line No.	2016 Firm Coincident Peak CP %		Industrial		2017 Firm Coincident Peak CP %		Industrial		
1			29.96%				32.94%		
Line No.	Description	Reference	June 2017	July 2017	August 2017	September 2017	October 2017	November 2017	
2	Total PURPA Purchased Power Capacity Costs		\$ 2,189,400	\$ 6,535,280	\$ 6,524,417	\$ 3,690,328	\$ 2,965,616	\$ 1,128,821	
3	Firm Natural Gas Transportation and Storage Costs		0	0	0	0	3,156,576	2,872,247	
4	Total Capacity Related Costs	Line 2 + Line 3	\$ 2,189,400	\$ 6,535,280	\$ 6,524,417	\$ 3,690,328	\$ 6,122,192	\$ 4,001,068	
5	Total System kWh Sales	Exhibit 2	7,382,797,262	8,213,697,211	8,242,499,300	7,632,543,035	6,668,383,285	6,410,573,998	
6	Capacity Related Costs Incurred (c/kWh)	Line 4 / Line 5 * 100	0.0297	0.0796	0.0792	0.0483	0.0918	0.0624	
7	SC Retail Sales kWh	Exhibit 2	1,840,787,327	2,004,626,644	2,045,712,681	1,907,259,402	1,664,779,554	1,604,311,093	
8	SC Capacity Related Cost Incurred	Line 6 * Line 7 / 100	\$ 545,893	\$ 1,594,994	\$ 1,619,300	\$ 922,158	\$ 1,528,421	\$ 1,001,308	
9	Industrial Capacity Related Cost Allocated by Firm CP	Line 8 * Line 1	\$ 163,549	\$ 477,857	\$ 485,139	\$ 276,277	\$ 457,912	\$ 299,990	
10	SC Industrial kWh Sales		806,706,799	798,057,466	831,997,449	801,642,566	762,795,158	762,675,787	
11	SC Industrial Capacity Related Cost Incurred (c/kWh)	Line 9 / Line 10 * 100	0.0203	0.0599	0.0583	0.0345	0.0600	0.0393	
12	SC Industrial Billed (c/kWh)	Company Records	0.0223	0.0223	0.0223	0.0223	0.0392	0.0621	
13	SC Capacity Related (Over) / Under Recovery	(-Line 12 + Line 11) * Line 10 / 100	\$ (16,347)	\$ 299,890	\$ 299,604	\$ 97,511	\$ 158,886	\$ (173,603)	
14	(Over) / Under Cumulative Balance May 2017	Prior Year Annual Filing	\$ 163,635						
15	Cumulative SC Industrial Capacity Related (Over) / Under Recovery	Line 13 + Prior Month Cum Bal	\$ 147,288	\$ 447,178	\$ 746,782	\$ 844,293	\$ 1,003,179	\$ 829,576	
Line No.	Description	Reference	December 2017	January 2018	February 2018	March 2018	April 2018	May 2018	Twelve Months Ended May 2018
16	Total PURPA Purchased Power Capacity Costs		\$ 848,469	\$ 1,196,326	\$ 1,251,488	\$ 1,048,160	\$ 1,126,843	\$ 1,089,472	\$ 29,594,620
17	Firm Natural Gas Transportation and Storage Costs		2,358,419	2,439,779	2,434,128	3,043,138	4,169,903	3,635,827	24,110,017
18	Total Capacity Related Costs	Line 16 + Line 17	\$ 3,206,888	\$ 3,636,105	\$ 3,685,616	\$ 4,091,298	\$ 5,296,747	\$ 4,725,299	\$ 53,704,637
19	Total System kWh Sales	Exhibit 2	7,057,410,509	8,697,594,873	7,453,819,034	6,443,723,578	6,581,829,396	6,581,962,808	87,366,834,289
20	Capacity Related Costs Incurred (c/kWh)	Line 18 / Line 19 * 100	0.0454	0.0418	0.0494	0.0635	0.0805	0.0718	
21	SC Retail Sales kWh	Exhibit 2	1,689,291,924	2,004,246,555	1,791,706,347	1,524,004,658	1,584,758,862	1,640,451,950	21,301,936,997
22	SC Capacity Related Cost Incurred	Line 20 * Line 21 / 100	\$ 767,614	\$ 837,893	\$ 885,927	\$ 967,633	\$ 1,275,339	\$ 1,177,707	\$ 13,124,189
23	Industrial Capacity Related Cost Allocated by Firm CP	Line 22 * Line 1	\$ 229,976	\$ 275,979	\$ 291,800	\$ 318,711	\$ 420,062	\$ 387,904	\$ 4,085,157
24	SC Industrial kWh Sales		708,506,309	683,255,122	725,511,686	678,002,864	728,518,246	786,225,267	9,073,894,719
25	SC Industrial Capacity Related Cost Incurred (c/kWh)	Line 23 / Line 24 * 100	0.0325	0.0404	0.0402	0.0470	0.0577	0.0493	
26	SC Industrial Billed (c/kWh)	Company Records	0.0623	0.0623	0.0623	0.0623	0.0623	0.0623	
27	SC Capacity Related (Over) / Under Recovery	(-Line 26 + Line 25)*Line 24 / 100	\$ (211,423)	\$ (149,689)	\$ (160,194)	\$ (103,685)	\$ (33,805)	\$ (101,914)	\$ (94,769)
28	Cumulative SC Industrial Capacity Related (Over) / Under Recovery	Line 27 + Prior Month Cum Bal	\$ 618,153	\$ 468,464	\$ 308,270	\$ 204,585	\$ 170,780	\$ 68,866	\$ 68,866



DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE  
PURPA PURCHASED POWER CAPACITY COSTS (OVER) / UNDER RECOVERY  
CALCULATION OF CAPACITY RELATED COSTS (OVER) / UNDER RECOVERY - INDUSTRIAL  
ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2018

Line No.		2016 Firm Coincident Peak CP %	Industrial	2017 Firm Coincident Peak CP %	Industrial	
1			29.96%		32.94%	
Line No.	Description	Reference	Estimated June 2018	Estimated July 2018	Estimated August 2018	Estimated September 2018
29	Total PURPA Purchased Power Capacity Costs		\$ 2,553,717	\$ 3,517,004	\$ 3,341,130	\$ 2,076,724
30	Firm Natural Gas Transportation and Storage Costs		4,758,845	4,466,654	4,538,367	5,220,184
31	Total Capacity Related Costs	Line 29 + Line 30	\$ 7,312,562	\$ 7,983,658	\$ 7,879,496	\$ 7,296,908
32	Total System kWh Sales	Exhibit 2	7,397,566,722	8,220,497,571	8,409,562,198	7,994,793,000
33	Capacity Related Costs Incurred (c/kWh)	Line 31 / Line 32 * 100	0.0989	0.0971	0.0937	0.0913
34	SC Retail Sales kWh	Exhibit 2	1,829,860,637	1,979,919,610	2,053,956,924	1,986,163,127
35	SC Capacity Related Cost Incurred	Line 33 * Line 34 / 100	\$ 1,808,834	\$ 1,922,876	\$ 1,924,493	\$ 1,812,786
36	Industrial Capacity Related Cost Allocated by Firm CP	Line 35 * Line 1	\$ 595,780	\$ 633,342	\$ 633,875	\$ 597,082
37	SC Projected Industrial kWh Sales		809,957,328	796,995,291	851,456,524	839,231,906
38	SC Industrial Capacity Related Cost Incurred (c/kWh)	Line 36 / Line 37 * 100	0.0736	0.0795	0.0744	0.0711
39	SC Industrial Billed (c/kWh)	Docket No. 2017-3-E	0.0623	0.0623	0.0623	0.0623
40	SC Capacity Related (Over) / Under Recovery	(-Line 39 + Line 38)*Line 37 /100	\$ 91,177	\$ 136,814	\$ 103,418	\$ 74,240
41	Cumulative SC Industrial Capacity Related (Over) / Under Recovery	Line 40 + Prior Month Cum Bal	\$ 160,042	\$ 296,857	\$ 400,274	\$ 474,515
42	SC Projected Industrial Sales (October 2018 - September 2019)	Exhibit 3				9,256,345,589
43	SC Industrial Capacity Related Increment / (Decrement) (c/kWh)	Line 41 / Line 42 * 100				0.0051

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE  
PROJECTED BILLING PERIOD CAPACITY RELATED COSTS  
FOR THE 12 MONTHS ENDING OCTOBER 1, 2018 TO SEPTEMBER 30, 2019

Line No.	Class	2017 Firm Coincident Peak (CP) KWs	CP %
1	Residential	1,617,566	38.84%
2	General Service / Lighting	1,175,294	28.22%
3	Industrial	1,371,687	32.94%
Total SC		4,164,547	100%

Line No.	Description	Reference	October 2018	November 2018	December 2018	January 2019	February 2019	March 2019
4	Total PURPA Purchased Power Capacity Costs		\$ 1,800,653	\$ 1,609,257	\$ 1,436,345	\$ 1,717,830	\$ 1,696,006	\$ 1,949,604
5	Firm Natural Gas Transportation and Storage Costs		5,211,925	5,441,832	5,110,180	5,607,255	5,667,617	4,887,299
6	Total Capacity Costs	Line 4 + Line 5	\$ 7,012,578	\$ 7,051,089	\$ 6,546,525	\$ 7,325,085	\$ 7,363,623	\$ 6,836,903
7	Total Projected System Sales kwhs (w/solar)	Exhibit 3	6,499,954,760	6,602,598,785	7,160,709,598	8,082,286,102	7,579,000,897	6,739,338,881
8	Capacity Related System Costs Incurred (c/kwh)	Line 6 / Line 7 *100	0.1079	0.1068	0.0914	0.0906	0.0972	0.1014
9	Projected SC Retail Sales kWh (October 2018 - September 2019)	Exhibit 3	1,642,461,420	1,645,838,456	1,719,824,102	1,930,817,460	1,879,057,152	1,689,772,083
10	SC Capacity Related Costs Incurred	Line 8 * Line 9 /100	\$ 1,771,995	\$ 1,757,634	\$ 1,572,312	\$ 1,749,926	\$ 1,825,659	\$ 1,714,234

Line No.	Description	Reference	April 2019	May 2019	June 2019	July 2019	August 2019	September 2019	12 Month Total
11	Total PURPA Purchased Power Capacity Costs		\$ 1,982,817	\$ 2,148,911	\$ 3,126,205	\$ 4,060,285	\$ 3,866,730	\$ 2,413,604	\$ 27,808,246
12	Firm Natural Gas Transportation and Storage Costs		6,012,999	6,308,810	6,008,272	5,886,678	5,987,234	6,131,107	68,261,208
13	Total Capacity Costs	Line 11 + Line 12	\$ 7,995,816	\$ 8,457,720	\$ 9,134,477	\$ 9,946,963	\$ 9,853,964	\$ 8,544,711	\$ 96,069,453
14	Total Projected System Sales kwhs (w/solar)	Exhibit 3	6,290,451,974	6,684,011,828	7,271,666,889	8,039,482,276	8,522,431,399	7,846,096,714	87,318,030,105
15	Capacity Related System Costs Incurred (c/kwh)	Line 13 / Line 14 *100	0.1271	0.1265	0.1256	0.1237	0.1156	0.1089	
16	Projected SC Retail Sales kWh (October 2018 - September 2019)	Exhibit 3	1,604,962,893	1,696,282,308	1,825,984,128	1,965,438,990	2,102,131,923	1,973,466,533	21,676,037,448
17	SC Capacity Related Costs Incurred	Line 15 * Line 16 /100	\$ 2,040,074	\$ 2,146,418	\$ 2,293,753	\$ 2,431,767	\$ 2,430,566	\$ 2,149,183	\$ 23,883,522
SC Capacity Related Costs Allocated on Firm CP kws									
18	Residential	Total Line 17 * Line 1							\$ 9,276,681
19	General Service / Lighting	Total Line 17 * Line 2							\$ 6,740,267
20	Industrial	Total Line 17 * Line 3							\$ 7,866,574
21	Total SC	Sum Lines 18 through 20							\$ 23,883,522

Projected SC Retail Sales kWh (October 2018 - September 2019)									
22	Residential	Exhibit 3							6,580,779,714
23	General Service / Lighting	Exhibit 3							5,838,912,144
24	Industrial	Exhibit 3							9,256,345,589
25	Total SC	Sum Lines 22 through 24							21,676,037,448

SC Capacity Related Costs c/kwh									
26	Residential	Line 18 / Line 22 * 100							0.1410
27	General Service / Lighting	Line 19 / Line 23 * 100							0.1154
28	Industrial	Line 20 / Line 24 * 100							0.0850

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
ACTUAL AND ESTIMATED DISTRIBUTED ENERGY RESOURCE PROGRAM INCREMENTAL COSTS  
FOR THE PERIOD JUNE 2017 - SEPTEMBER 2018

Line No.	Description	Reference	June 2017	July 2017	August 2017	September 2017	October 2017	November 2017	
<u>DERP Incremental Costs</u>									
1	Purchased Power Agreements		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2	DERP NEM Incentive		169,485	180,971	192,634	200,057	163,736	147,262	
3	Solar Rebate Program		151,422	156,814	164,554	167,508	168,422	187,295	
4	Shared Solar Program		-	-	-	-	-	-	
5	Carrying Costs on Deferred Amounts		147,560	152,043	157,864	162,394	163,420	171,430	
6	NEM Avoided Capacity Costs		9,711	10,386	11,065	11,505	13,490	14,555	
7	NEM Meter Costs		16,201	17,397	18,360	19,145	20,242	21,154	
8	General and Administrative Expenses		83,151	57,925	88,950	39,303	43,228	26,329	
9	Total DERP Incremental Costs	Sum Lines 1 through 8	\$ 577,529	\$ 575,536	\$ 633,427	\$ 599,912	\$ 572,537	\$ 568,025	
10	Revenue Collected								
11	SC DERP Incremental (Over)/Under Recovery	Company Record	\$ 578,608	\$ 585,411	\$ 585,871	\$ 584,504	\$ 443,813	\$ 306,391	
12	(Over)/Under Cumulative Balance-May 2017	Line 9 - Line 10	\$ (1,079)	\$ (9,875)	\$ 47,556	\$ 15,408	\$ 128,724	\$ 261,634	
13	Adjustments	Prior Year annual filing	\$ (4,214,130)						
14	Cumulative SC DERP Incremental (Over)/ Under Recovery	Prior Month Cum bal + Line 11 + Line 13	\$ (4,215,209)	\$ (4,225,084)	\$ (4,177,528)	\$ (4,162,120)	\$ (4,033,396)	\$ (3,771,761)	
Line No.	Description	Reference	December 2017	January 2018	February 2018	March 2018	April 2018	May 2018	Twelve Months Ended May 2018

15	<u>DERP Incremental Costs</u>								
16	Purchased Power Agreements		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
17	DERP NEM Incentive		160,463	167,672	169,047	181,853	242,518	253,803	2,229,501
18	Solar Rebate Program		211,084	212,597	221,309	224,129	225,437	227,696	2,318,266
19	Shared Solar Program		-	-	-	-	-	-	-
20	Carrying Costs on Deferred Amounts		192,654	204,345	208,350	212,970	250,667	223,757	2,247,456
21	NEM Avoided Capacity Costs		15,563	20,823	20,955	22,391	30,199	32,939	213,582
22	NEM Meter Costs		23,133	24,187	25,555	27,007	39,136	41,256	292,772
23	General and Administrative Expenses		39,278	41,076	54,664	46,540	32,573	32,239	585,255
	Total DERP Incremental Costs	Sum Lines 13 through 20	\$ 642,176	\$ 670,700	\$ 699,880	\$ 714,890	\$ 820,530	\$ 811,689	\$ 7,886,832
24	Revenue Collected								
25	SC DERP Incremental (Over)/Under Recovery	Company Record	\$ 306,538	\$ 306,649	\$ 305,749	\$ 307,566	\$ 306,360	\$ 307,124	\$ 4,924,585
26	Adjustments	Line 23 - Line 24	\$ 335,638	\$ 364,051	\$ 394,131	\$ 407,324	\$ 514,170	\$ 504,565	\$ 2,962,248
27	Cumulative SC DERP Incremental (Over)/ Under Recovery	Prior Month Cum bal + Line 25 + Line 26	\$ (3,436,123)	\$ (3,072,073)	\$ (2,677,941)	\$ (2,290,955)	\$ (1,466,181)	\$ (966,265)	\$ (966,265)

Line No.	Description	Reference	Estimated June 2018	Estimated July 2018	Estimated August 2018	Estimated September 2018	Estimated 4 months ended Sept 2018
<u>DERP Incremental Costs</u>							
28	Purchased Power Agreements		\$ -	\$ -	\$ -	\$ -	\$ -
29	DERP NEM Incentive		309,394	322,211	331,099	338,791	1,301,494
30	Solar Rebate Program		227,720	228,127	228,647	231,204	915,697
31	Shared Solar Program		-	-	-	-	-
32	Carrying Costs on Deferred Amounts		223,626	222,510	221,655	221,940	889,731
33	NEM Avoided Capacity Costs		34,607	36,094	37,592	39,277	147,570
34	NEM Meter Costs		42,877	44,490	46,094	47,698	181,158
35	General and Administrative Expenses		42,733	42,733	42,733	42,733	170,933
36	Total DERP Incremental Costs	Sum Lines 28 through 35	\$ 880,956	\$ 896,164	\$ 907,821	\$ 921,643	\$ 3,606,584
37	Estimated Revenue Collected						
38	SC DERP Incremental (Over)/Under Recovery		\$ 229,401	\$ 228,927	\$ 228,611	\$ 228,569	\$ 915,509
39	Adjustments	Line 23 - Line 24	\$ 651,555	\$ 667,237	\$ 679,210	\$ 693,074	\$ 2,691,076
40	Cumulative SC DERP Incremental (Over)/ Under Recovery	Prior Month Cum bal + Line 25 + Line 26	\$ (314,710)	\$ 352,527	\$ 1,031,737	\$ 1,724,810	\$ 1,724,810

Note (1) Adjustments represent prior period adjustments reflected in the monthly Schedule 4 filings.



DUKE ENERGY CAROLINAS, LLC

## SOUTH CAROLINA RETAIL FUEL CASE

## PROJECTED DISTRIBUTED ENERGY RESOURCE PROGRAM INCREMENTAL

## FOR THE 12 MONTHS OCTOBER 1, 2018 TO SEPTEMBER 30, 2019

Line No.	Description	Reference	October 2018	November 2018	December 2018	January 2019	February 2019	March 2019
<b><u>DERP Incremental Costs</u></b>								
1	Purchased Power Agreements		\$ -	\$ -	\$ -	\$ 1,314	\$ 1,314	\$ 1,314
2	DERP NEM Incentive		364,050	350,979	343,785	355,734	359,894	371,080
3	Solar Rebate Program		234,815	238,426	242,066	246,399	253,621	260,844
4	Shared Solar Program		-	-	-	2,982	2,982	2,982
5	Carrying Costs on Deferred Amounts		223,854	226,306	228,753	231,562	236,250	242,431
6	NEM Avoided Capacity Costs		40,165	40,986	41,810	42,696	43,846	44,831
7	NEM Meter Costs		55,761	55,810	55,859	55,908	55,957	55,993
8	General and Administrative Expenses		42,733	42,733	42,733	24,205	24,205	24,205
9	<b>Total DERP Incremental Costs</b>	Sum Lines 1 through 8	<b>\$ 961,378</b>	<b>\$ 955,240</b>	<b>\$ 955,005</b>	<b>\$ 960,799</b>	<b>\$ 978,067</b>	<b>\$ 1,003,679</b>

Line No.	Description	Reference	April 2019	May 2019	June 2019	July 2019	August 2019	September 2019	12 Month Total
<b><u>DERP Incremental Costs</u></b>									
10	Purchased Power Agreements		\$ 1,314	\$ 1,314	\$ 1,314	\$ 1,314	\$ 1,314	\$ 1,314	\$ 11,823
11	DERP NEM Incentive		385,692	385,120	387,066	383,128	375,495	369,983	4,432,004
12	Solar Rebate Program		260,844	260,844	260,844	260,844	260,844	260,844	3,041,232
13	Shared Solar Program		2,982	2,982	2,982	2,982	6,448	6,448	33,770
14	Carrying Costs on Deferred Amounts		244,730	243,189	241,648	240,107	238,566	237,025	2,834,420
15	NEM Avoided Capacity Costs		44,831	44,831	44,831	44,831	44,831	44,831	523,321
16	NEM Meter Costs		55,993	55,993	55,993	55,993	55,993	55,993	671,247
17	General and Administrative Expenses		24,205	24,205	24,205	24,205	24,205	24,205	346,041
18	<b>Total DERP Incremental Costs</b>	Sum Lines 10 through 17	<b>\$ 1,020,589</b>	<b>\$ 1,018,478</b>	<b>\$ 1,018,883</b>	<b>\$ 1,013,403</b>	<b>\$ 1,007,695</b>	<b>\$ 1,000,642</b>	<b>\$ 11,893,858</b>

DUKE ENERGY CAROLINAS, LLC  
  
SOUTH CAROLINA RETAIL FUEL CASE  
PROJECTED BILLING PERIOD INCREMENTAL COSTS FACTORS FOR DERP COSTS  
FOR THE BILLING PERIOD OCTOBER 2018 - SEPTEMBER 2019

Total Incremental Costs	
1 Total DERP Projected Incremental Costs	Exhibit 10 Line 21                      \$                      11,893,858

Allocation of DERP Incremental Costs for October 2018 - September 2019			
	Firm Peak Demand - 2017	Total Incremental Costs	Cost Allocated per Firm Peak Demand
2 Residential	38.84%		4,619,734
3 General	28.22%	\$	3,356,615
4 Industrial	32.94%		3,917,509
5 Total	100.00%	\$                      11,893,858                      \$	11,893,858

	Total Cost Allocated per Firm Peak Demand	Projected Number of Accounts in Billing Period	\$ per Account per Year	\$ per Account per Month
6 Residential	\$                      4,619,734	491,790	\$                      9.39	\$                      0.78
7 General	3,356,615	32,320	\$                      103.86	\$                      8.66
8 Industrial	3,917,509	1,518	\$                      2,580.70	\$                      215.06
9 Total	\$                      11,893,858	525,628		



**DUKE ENERGY CAROLINAS, LLC**  
**SOUTH CAROLINA RETAIL FUEL CASE**  
**CALCULATION OF DEEP AVOIDED COST (OVER) / UNDER RECOVERY - GENERAL SERVICE / LIGHTING**  
**ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2017 - SEPTEMBER 2018**

		2016 Firm Coincident Peak CP %		General Service / Lighting		2017 Firm Coincident Peak CP %		General Service / Lighting	
		27.93%						28.22%	
Line No.	Description	Reference	June 2017	July 2017	August 2017	September 2017	October 2017	November 2017	
2	Purchased Power Agreements Shared Solar Program <b>Total DERP Avoided Costs</b>	Line 2 + Line 3	\$ 9,485 \$ \$ 9,485 \$	4,609 \$ 4,609 \$	(12,571) \$ (12,571) \$	395 \$ 395 \$	325 \$ 325 \$	245 \$ 245 \$	
5	Total System kWh Sales	Exhibit 2	7,382,797.262	8,213,697.211	8,242,499.300	7,632,543.035	6,666,383.285	6,410,573.998	
6	DERP Avoided System Cost - (c/kWh)	Line 4 / Line 5* 100	0.0001	0.0001	(0.0002)	0.0000	0.0000	0.0000	
7	SC Retail Sales kWh	Exhibit 2	1,840,787.327	2,004,626.644	2,045,712.681	1,907,259.402	1,664,779.554	1,604,311.093	
8	SC DERP Avoided Costs	Line 6 * Line 7 / 100	\$ 2,366 \$	\$ 1,125 \$	(3,121) \$	\$ 100 \$	\$ 81 \$	\$ 61 \$	
9	General Service/Lighting DERP Avoided Costs Allocated by Firm CP	Line 8 * Line 1	\$ 661 \$	\$ 314 \$	(872) \$	\$ 28 \$	\$ 23 \$	\$ 17 \$	
10	SC General Service/Lighting kWh Sales		506,172,821	540,981,553	550,338,633	535,402,529	460,342,322	429,859,995	
11	SC General Service/Lighting DERP Avoided Cost (c/kWh)	Line 9 / Line 10 * 100	0.0001	0.0001	(0.0002)	0.0000	0.0000	0.0000	
12	SC General Service/Lighting Rate Billed (c/kWh)	Company Records	(0.0011)	(0.0011)	(0.0011)	(0.0011)	(0.0011)	(0.0008)	
13	SC DERP Avoided Cost (Over) / Under Recovery	(Line 11 - Line 12) * Line 10 / 100	\$ 6,229 \$	\$ 6,265 \$	\$ 5,182 \$	\$ 5,917 \$	\$ 3,919 \$	\$ 2,179 \$	
14	(Over) / Under Cumulative Balance May 2017	Prior Year Annual Filing	\$ (52,302)						
15	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 13 + prior Month Cum Bal	\$ (46,073) \$	\$ (39,808) \$	\$ (34,626) \$	\$ (28,709) \$	\$ (24,790) \$	\$ (22,611) \$	
Line No.	Description	Reference	December 2017	January 2018	February 2018	March 2018	April 2018	May 2018	Twelve Months Ended May 2018
16	Purchased Power Agreements Shared Solar Program <b>Total DERP Avoided Costs</b>	Line 16 + Line 17	\$ 169 \$ \$ 169 \$	1,880 \$ 1,880 \$	487 \$ 487 \$	23,919 \$ 23,919 \$	17,442 \$ 17,442 \$	424 \$ 424 \$	46,809 \$ 46,809 \$
19	Total System kWh Sales	Exhibit 2	7,057,410.509	8,697,594.873	7,453,819.034	6,443,723.578	6,581,829.396	6,581,962.808	87,366,834.289
20	DERP Avoided System Cost - (c/kWh)	Line 18 / Line 19* 100	0.0000	0.0000	0.0000	0.0004	0.0003	0.0000	
21	SC Retail Sales kWh	Exhibit 2	1,689,291.924	2,004,246.555	1,791,706.347	1,524,004.658	1,584,758.862	1,640,451.950	21,301,936.997
22	SC DERP Avoided Costs	Line 20 * Line 21 / 100	\$ 40 \$	\$ 433 \$	\$ 117 \$	\$ 5,656 \$	\$ 4,199 \$	\$ 106 \$	\$ 11,162 \$
23	General Service/Lighting DERP Avoided Costs Allocated by Firm CP	Line 22 * Line 1	\$ 11 \$	\$ 122 \$	\$ 33 \$	\$ 1,596 \$	\$ 1,185 \$	\$ 30 \$	\$ 3,148 \$
24	SC General Service/Lighting kWh Sales		433,568.983	495,802.604	455,308.603	406,733.337	419,580.867	444,529.906	5,678,642.153
25	SC General Service/Lighting DERP Avoided Cost (c/kWh)	Line 23 / Line 24 * 100	0.0000	0.0000	0.0000	0.0004	0.0003	0.0000	
26	SC General Service/Lighting Rate Billed (c/kWh)	Company Records	(0.0005)	(0.0005)	(0.0005)	(0.0005)	(0.0005)	(0.0005)	
27	SC DERP Avoided Cost (Over) / Under Recovery	(Line 25 - Line 26) * Line 24 / 100	\$ 2,179 \$	\$ 2,601 \$	\$ 2,310 \$	\$ 3,630 \$	\$ 3,283 \$	\$ 2,252 \$	\$ 45,946 \$
28	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 27 + prior Month Cum Bal	\$ (20,432) \$	\$ (17,831) \$	\$ (15,521) \$	\$ (11,891) \$	\$ (8,609) \$	\$ (6,356) \$	\$ (6,356) \$
Line No.	Description	Reference	Estimated June 2018	Estimated July 2018	Estimated August 2018	Estimated September 2018	Estimated 4 months ended Sept 2018		
29	Purchased Power Agreements Shared Solar Program <b>Total DERP Avoided Costs</b>	Line 29 + Line 30	\$ 454 \$ \$ 454 \$	438 \$ 438 \$	377 \$ 377 \$	368 \$ 368 \$	1,636 \$ 1,636 \$		
32	Total Projected System Sales kWhs (w/solar)	Exhibit 2	7,397,566.722	8,220,497.571	8,409,562.198	7,994,793.000	32,022,419.491		
33	DERP Avoided System Cost - (c/kWh)	Line 31 / Line 32* 100	0.0000	0.0000	0.0000	0.0000	0.0000		
34	Projected SC Retail Sales kWh	Exhibit 2	1,829,860.637	1,979,919.610	2,053,956.924	1,986,163.127	7,849,900.299		
35	SC DERP Avoided Costs	Line 33 * Line 34 / 100	\$ 112 \$	\$ 105 \$	\$ 92 \$	\$ 91 \$	\$ 401 \$		
36	General Service/Lighting DERP Avoided Costs Allocated by Firm CP	Line 35 * Line 1	\$ 32 \$	\$ 30 \$	\$ 26 \$	\$ 26 \$	\$ 113 \$		
37	SC General Service/Lighting kWh Sales		504,947.004	544,523.558	556,952.933	556,543.499	2,162,966.994		
38	SC General Service/Lighting DERP Avoided Cost (c/kWh)	Line 36 / Line 37 * 100	0.0000	0.0000	0.0000	0.0000	0.0000		
39	SC General Service/Lighting Rate Billed (c/kWh)	Docket No. 2017-3-E	(0.0005)	(0.0005)	(0.0005)	(0.0005)	(0.0005)		
40	SC DERP Avoided Cost (Over) / Under Recovery	(Line 38 - Line 39) * Line 31/100	\$ 2,556 \$	\$ 2,752 \$	\$ 2,811 \$	\$ 2,808 \$	\$ 10,928 \$		
41	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 40 + prior Month Cum Bal	\$ (3,800) \$	\$ (1,047) \$	\$ 1,763 \$	\$ 4,572 \$	\$ 4,572 \$		
42	SC Projected General Service / Lighting Sales (October 2018 - September 2019)	Exhibit 3					5,838,912.144		
43	SC Residential DERP AC Increment / (Decrement) (c/kWh)	Line 41 / Line 42* 100					0.0001		



DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF DERP AVOIDED COST (OVER) / UNDER RECOVERY - INDUSTRIAL  
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2017 - SEPTEMBER 2018

Line No.		2016 Firm Coincident Peak CP %		Industrial		2017 Firm Coincident Peak CP %		Industrial	
1				29.96%				32.94%	

Line No.	Description	Reference	June 2017	July 2017	August 2017	September 2017	October 2017	November 2017
2	Purchased Power Agreements		\$ 9,485	\$ 4,609	\$ (12,571)	\$ 395	\$ 325	\$ 245
3	Shared Solar Program		-	-	-	-	-	-
4	Total DERP Avoided Costs	Line 2 + Line 3	\$ 9,485	\$ 4,609	\$ (12,571)	\$ 395	\$ 325	\$ 245
5	Total System kWh Sales	Exhibit 2	7,382,797,262	8,213,697,211	8,242,499,300	7,632,543,035	6,668,383,285	6,410,573,998
6	DERP Avoided System Cost - (c/kWh)	Line 4 / Line 5* 100	0.0001	0.0001	(0.0002)	0.0000	0.0000	0.0000
7	SC Retail Sales kWh	Exhibit 2	1,840,787,327	2,004,626,644	2,045,712,681	1,907,259,402	1,664,779,554	1,604,311,093
8	SC DERP Avoided Costs	Line 6 * Line 7 / 100	2,366	\$ 1,125	\$ (3,121)	\$ 100	\$ 81	\$ 61
9	Industrial DERP Avoided Costs Allocated by Firm CP	Line 8 * Line 1	709	\$ 337	\$ (935)	\$ 30	\$ 24	\$ 18
10	SC Industrial kWh Sales		806,706,799	798,057,466	831,997,449	801,642,566	762,795,158	762,675,787
11	SC Industrial DERP Avoided Cost (c/kWh)	Line 9 / Line 10 * 100	0.0001	0.0000	(0.0001)	0.0000	0.0000	0.0000
12	SC Industrial Rate Billed (c/kWh)	Company Records	(0.0013)	(0.0013)	(0.0013)	(0.0013)	(0.0007)	0.0001
13	SC DERP Avoided Cost (Over) / Under Recovery	(Line 11 - Line 12) * Line 10 / 100	11,196	\$ 10,712	\$ 9,881	\$ 10,451	\$ 5,428	\$ (690)
14	(Over) / Under Cumulative Balance May 2017	Prior Year Annual Filing	\$ (37,313)					
15	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 13 + prior Month Cum Bal	\$ (26,117)	\$ (15,405)	\$ (5,524)	\$ 4,927	\$ 10,355	\$ 9,665

Line No.	Description	Reference	December 2017	January 2018	February 2018	March 2018	April 2018	May 2018	Twelve Months Ended May 2018
16	Purchased Power Agreements		\$ 169	\$ 1,880	\$ 487	\$ 23,919	\$ 17,442	\$ 424	\$ 46,809
17	Shared Solar Program		-	-	-	-	-	-	-
18	Total DERP Avoided Costs	Line 16 + Line 17	\$ 169	\$ 1,880	\$ 487	\$ 23,919	\$ 17,442	\$ 424	\$ 46,809
19	Total System kWh Sales	Exhibit 2	7,057,410,509	8,697,594,873	7,453,819,034	6,443,723,578	6,581,829,396	6,581,962,808	87,366,834,289
20	DERP Avoided System Cost - (c/kWh)	Line 18 / Line 19* 100	0.0000	0.0000	0.0000	0.0004	0.0003	0.0000	0.0000
21	SC Retail Sales kWh	Exhibit 2	1,689,291,924	2,004,246,555	1,791,706,347	1,524,004,658	1,584,758,862	1,640,451,950	21,301,936,997
22	SC DERP Avoided Costs	Line 20 * Line 21 / 100	40	\$ 433	\$ 117	\$ 5,656	\$ 4,199	\$ 106	\$ 11,162
23	Industrial DERP Avoided Costs Allocated by Firm CP	Line 22 * Line 1	12	\$ 143	\$ 39	\$ 1,863	\$ 1,383	\$ 35	\$ 3,657
24	SC Industrial kWh Sales		708,506,309	683,255,122	725,511,686	678,002,864	728,518,246	786,225,267	9,073,894,719
25	SC Industrial DERP Avoided Cost (c/kWh)	Line 23 / Line 24 * 100	0.0000	0.0000	0.0000	0.0003	0.0002	0.0000	0.0000
26	SC Industrial Rate Billed (c/kWh)	Company Records	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
27	SC DERP Avoided Cost (Over) / Under Recovery	(Line 25 - Line 26) * Line 24 / 100	(697)	\$ (540)	\$ (687)	\$ 1,184	\$ 654	\$ (751)	\$ 46,141
28	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 27 + prior Month Cum Bal	\$ 8,969	\$ 8,428	\$ 7,742	\$ 8,926	\$ 9,580	\$ 8,828	\$ 8,828

Line No.	Description	Reference	Estimated June 2018	Estimated July 2018	Estimated August 2018	Estimated September 2018	Estimated 4 months ended Sept 2018
29	Purchased Power Agreements		\$ 454	\$ 438	\$ 377	\$ 368	\$ 1,636
30	Shared Solar Program		-	-	-	-	-
31	Total DERP Avoided Costs	Line 29 + Line 30	\$ 454	\$ 438	\$ 377	\$ 368	\$ 1,636
32	Total System kWh Sales	Exhibit 2	7,397,566,722	8,220,497,571	8,409,562,198	7,994,793,000	32,022,419,491
33	DERP Avoided System Cost - (c/kWh)	Line 31 / Line 32* 100	0.0000	0.0000	0.0000	0.0000	0.0000
34	Projected SC Retail Sales kWh	Exhibit 2	1,829,860,637	1,979,919,610	2,053,956,924	1,986,163,127	7,849,900,299
35	SC DERP Avoided Costs	Line 33 * Line 34 / 100	112	\$ 105	\$ 92	\$ 91	\$ 401
36	Industrial DERP Avoided Costs Allocated by Firm CP	Line 35 * Line 1	37	\$ 35	\$ 30	\$ 30	\$ 132
37	SC Industrial kWh Sales		809,957,328	796,995,291	851,456,524	839,231,906	3,297,641,049
38	SC Industrial DERP Avoided Cost (c/kWh)	Line 36 / Line 37 * 100	0.0000	0.0000	0.0000	0.0000	0.0000
39	SC Industrial Rate Billed (c/kWh)	Docket No. 2017-3-E	0.0001	0.0001	0.0001	0.0001	0.0001
40	SC DERP Avoided Cost (Over) / Under Recovery	(Line 38 - Line 39) * Line 31/100	(773)	\$ (762)	\$ (821)	\$ (809)	\$ (3,164)
41	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 40 + prior Month Cum Bal	\$ 8,056	\$ 7,294	\$ 6,473	\$ 5,664	\$ 5,664
42	SC Projected Industrial Sales (October 2018 - September 2019)	Exhibit 3					9,256,345,589
43	SC Industrial DERP AC Increment / (Decrement) (c/kWh)	Line 41 / Line 42* 100					0.0001

**DUKE ENERGY CAROLINAS, LLC**  
**SOUTH CAROLINA RETAIL FUEL CASE**  
**PROJECTED BILLING PERIOD DERP AVOIDED COSTS**  
**FOR THE 12 MONTHS ENDING OCTOBER 1, 2018 TO SEPTEMBER 30, 2019**

Line No.	Class	2017 Firm Coincident Peak (CP) KWs	CP %
1	Residential	1,617,566	38.84%
2	General Service / Lighting	1,175,294	28.22%
3	Industrial	1,371,687	32.94%
	Total SC	4,164,547	100%

Line No.	Description	Reference	October 2018	November 2018	December 2018	January 2019	February 2019	March 2019
4	Purchased Power Agreements		\$ 349	\$ 297	\$ 211	\$ 9,935	\$ 9,942	\$ 51,027
5	Shared Solar Program		-	-	-	18,959	18,959	18,959
6	<b>Total DERP Avoided Costs</b>	Line 4 + Line 5	\$ 349	\$ 297	\$ 211	\$ 28,894	\$ 28,901	\$ 69,986
7	Total Projected System Sales kWhs (w/solar)	Exhibit 3	6,499,954,760	6,602,598,785	7,160,709,598	8,082,286,102	7,579,000,897	6,739,338,881
8	DERP Avoided System Cost - (c/kWh)	Line 6 / Line 7 * 100	0.0000	0.0000	0.0000	0.0004	0.0004	0.0010
9	Projected SC Retail Sales kWh (October 2018 - Septeml	Exhibit 3	1,642,461,420	1,645,838,456	1,719,824,102	1,930,817,460	1,879,057,152	1,689,772,083
10	SC DERP Avoided Costs	Line 8 * Line 9 /100	\$ 88	\$ 74	\$ 51	\$ 6,903	\$ 7,165	\$ 17,548

Line No.	Description	Reference	April 2019	May 2019	June 2019	July 2019	August 2019	September 2019	12 Month Total
11	Purchased Power Agreements		\$ 10,040	\$ 10,064	\$ 10,085	\$ 10,070	\$ 10,015	\$ 10,007	\$ 132,041
12	Shared Solar Program		18,959	18,959	18,959	18,959	28,448	28,448	189,611
13	<b>Total DERP Avoided Costs</b>	Line 11 + Line 12	\$ 28,999	\$ 29,023	\$ 29,044	\$ 29,029	\$ 38,463	\$ 38,455	\$ 321,652
14	Total Projected System Sales kWhs (w/solar)	Exhibit 3	6,290,451,974	6,684,011,828	7,271,666,889	8,039,482,276	8,522,431,399	7,846,096,714	87,318,030,105
15	DERP Avoided System Cost - (c/kWh)	Line 13 / Line 14 *100	0.0005	0.0004	0.0004	0.0004	0.0005	0.0005	
16	Projected SC Retail Sales kWh (October 2018 - Septeml	Exhibit 3	1,604,962,893	1,696,282,308	1,825,984,128	1,965,438,990	2,102,131,923	1,973,466,533	21,676,037,448
17	SC DERP Avoided Costs	Line 15 * Line 16 /100	\$ 7,399	\$ 7,366	\$ 7,293	\$ 7,097	\$ 9,487	\$ 9,672	\$ 80,143
18	<b>SC DERP Avoided Cost Allocated on Firm CP kWs</b>								
18	Residential	Total Line 17 * Line 1							\$ 31,129
19	General Service / Lighting	Total Line 17 * Line 2							\$ 22,617
20	Industrial	Total Line 17 * Line 3							\$ 26,397
21	Total SC	Sum Lines 18 through 20							\$ 80,143

22	Projected SC Retail Sales kWh (October 2018 - September 2019)	Exhibit 3							
22	Residential	Exhibit 3							6,580,779,714
23	General Service / Lighting	Exhibit 3							5,838,912,144
24	Industrial	Exhibit 3							9,256,345,589
25	Total SC	Sum Lines 22 through 24							21,676,037,448

26	<b>SC DERP Avoided Cost c/kWh</b>								
26	Residential	Line 18 / Line 22 * 100							0.0005
27	General Service / Lighting	Line 19 / Line 23 * 100							0.0004
28	Industrial	Line 20 / Line 24 * 100							0.0003

McGee Exhibit 14  
DOCKET NO 2018-3-E

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE  
DERP NEM INCENTIVE CALCULATION  
EFFECTIVE OCTOBER 1, 2018 - SEPTEMBER 30, 2019

Line No.	Description	Reference	Residential		General Service (Rate Schedule SCLGS)
			(Rate Schedule SCRS)		
1	Representative NEM Customer bill without solar		\$ 1,390.14	\$	35,530.91
2	Representative NEM Customer bill With solar		\$ 740.99	\$	24,756.09
3	Difference	Line 1 - 2	\$ 649.15	\$	10,774.82
4	Representative annual solar production kWhs		6,084		153,407
5	Value of solar in dollars per kWh	Proposed	0.05323		0.05310
6	Net Benefits delivered by solar production	Line 4 * 5	\$ 323.86	\$	8,145.70
7	Under-recovered revenue from NEM Customer	Line 3 - 6	\$ 325.30	\$	2,629.13
8	Annual solar production kWhs	Line 4	6,084		153,407
9	DERP NEM Incentive in dollars per kWh	Line 7 / Line 8	\$ 0.05347	\$	0.01714